

Monograph



https://doi.org/10.11646/zootaxa.4252.1.1 http://zoobank.org/urn:lsid:zoobank.org:pub:ECB3DDB9-205D-40FC-A7BD-47D72DF41C3D

ZOOTAXA



The Palaearctic types of Chrysididae (Insecta, Hymenoptera) deposited in the Hungarian Natural History Museum, Budapest

PAOLO ROSA¹, ZOLTÁN VAS² & ZAI-FU XU^{3, 4}

¹Via Belvedere 8/d, I-20881 Bernareggio (MB), Italy. E-mail: rosa@chrysis.net

²Hymenoptera Collection, Department of Zoology, Hungarian Natural History Museum, Budapest, H-1088 Budapest,

Baross Str. 13., Hungary. E-mail: vas@nhmus.hu

³Department of Entomology, South China Agricultural University, Guangzhou 510640, China. E-mail: xuzaifu@scau.edu.cn

⁴Correspondig author. E-mail: xuzaifu@scau.edu.cn



Magnolia Press Auckland, New Zealand

PAOLO ROSA ZOLTAN VAS & ZAI-FU XU

The Palaearctic types of Chrysididae (Insecta, Hymenoptera) deposited in the Hungarian Natural
History Museum, Budapest
(7-4.00, 4252)

(Zootaxa 4252))
----------------	---

130 pp.; 30 cm.

11 Apr. 2017

ISBN 978-1-77670-118-6 (paperback)

ISBN 978-1-77670-119-3 (Online edition)

FIRST PUBLISHED IN 2017 BY

Magnolia Press

P.O. Box 41-383

Auckland 1346

New Zealand

e-mail: magnolia@mapress.com

http://www.mapress.com/j/zt

© 2017 Magnolia Press

ISSN 1175-5326 (Print edition)

ISSN 1175-5334 (Online edition)

Table of contents

Abstract	3
Introduction	3
Material and methods	8
Results	9
Subfamily Cleptinae	9
Subfamily Chrysidinae	17
Tribe Chrysidini	17
Tribe Elampini	83
Tribe Parnopini	114
Specimens labelled as "type", but not part of type series	116
Final considerations	119
Acknowledgements	121
References	

Abstract

A critical and annotated catalogue of the Palaearctic types of chrysidid species, subspecies and varieties deposited in the Magyar Természettudományi Múzeum is given. The lectotype of *Hedychrum luculentum* Förster, 1853 and the neotype of *Chrysis amasina* Mocsáry, 1889 are designated. Six new synonyms are proposed: *Chrysis varicornis* Spinola, 1838 = *Chrysis cyanocoelia* Mocsáry, 1889, **syn. nov.**; *Hedychridium adventicium* Zimmermann, 1962 = *Hedychridium jazygicum* Móczár, 1964, **syn. nov.**; *Hedychrum cribratum* Mocsáry, 1909 = *Hedychrum punctigerum* Mocsáry, 1909, **syn. nov.**; *Holopyga generosa* (Förster, 1853) = *Holopyga hortobagyensis* Móczár, 1984, **syn. nov.**; *Holopyga turkestanica* Mocsáry, 1909 = *Holopyga crassepuncta* Semenov, 1954, **syn. nov.**; and *Pseudomalus cupratus* (Mocsáry, 1889) = *Pseudomalus meridianus* Strumia, 1996, **syn. nov.**. One species is revalidated: *Holopyga turkestanica* Mocsáry, 1909, **stat. resurr.**New status is proposed for: *Pseudomalus cupratus* (Mocsáry, 1889), **stat. nov.**. New combination is proposed for: *Hedychridium amoenum* (Mocsáry, 1911), **comb. nov.**. The reversal of priority is proposed for: *Ellampus biaccinctus* du Buysson, 1893, **nomen protectum**, and *E. auratus* var. *gasperinii* Mocsáry, 1889, **nomen oblitum**. New name is proposed for: *Chrysis fusca* Rosa, **nom. nov.** *pro Chrysis ignita* var. *infuscata* Mocsáry, 1889 *nec* Brullé, 1846. Pictures of eighty-nine type specimens are also provided.

Key words: Cleptinae, Chrysidinae, Chrysidini, Elampini, Parnopini, catalogue, lectotype, neotype, synonym

Introduction

The Chrysididae collection in the Magyar Természettudományi Múzeum (HNHM) is undoubtedly one of the most important collections in the World (Bohart & French 1986; Kimsey & Bohart 1991) and the largest historical collection in terms of number of types and specimens. It includes about 20,000 specimens of Chrysididae belonging to approximately 900 species, subspecies and varieties, and approximately 950 types belonging to 520 taxa from all over the world, and described by 25 authors: Aaron (1885), Arens (2014), Bingham (1903), Bischoff (1910), Bohart (1964, 1980), Bohart & Brumley (1967), Bohart & Campos (1960), Bohart & Kimsey (1978, 1982), du Buysson (1887, in Mocsáry 1902a, 1913a), Dalman (1823), Ducke (1901, 1902a, 1902b, 1902c, 1903, 1907), Förster (1853), French (in Bohart & Kimsey 1982), Kimsey (1987a), Krombein (1960), Linsenmaier (1951, 1959a, 1959b, 1968, 1987, 1994b), Mader (1939), Mocsáry (1878, 1879a, 1879b, 1882, 1883, 1887a, 1889, 1890, 1893, 1896, 1897, 1899, 1902a, 1902b, 1904a, 1904b, 1908a, 1908b, 1909, 1911a, 1911b, 1912a, 1912b, 1913a, 1913b, 1913c, 1914), Mocsáry (in Radoszkowski 1889), Mocsáry & Szépligeti (1901), Móczár (1946, 1949, 1951, 1964b, 1965, 1967a, 1967b, 1968, 1984, 1996a, 1997a, 1998a, 2000b, 2001, 2009), Moore (1966), Morice (1909), Nurse (1902, 1903a, 1903b), Radoszkowski (1877, 1889, 1891), Riek (1955), Semenov-Tian-Shanskij (1910, 1920), and Zilahi-Kiss (1915, 1927).

The early beginnings of the HNHM collections date back to 1822–1851, when the zoological collections were parts of the "Camera Naturae et Artis Productorum" of the Magyar Természettudományi Múzeum and the invertebrate collections were managed by Dr. Imre (Emerich) Frivaldszky (von Frivald), who was born on February 6, 1799 in Slovakia, Bacskó, and died on October 19, 1870 in Hungary, Jobbágyi. Imre Frivaldszky was

both botanist and entomologist, mostly interested in Lepidoptera and Coleoptera, who described about 300 new species of plants and animals (Bálint & Abadjiev 2006). Imre Frivaldszky, together with the coleopterologist and relative, Dr. János Frivaldszky, contributed greatly to the formation of the Hymenoptera Collection and to the arrival of the first batch of Chrysididae into the collection. In particular, I. Frivaldszky sent part of his Chrysididae to Förster (1853), who described many new species based on his material. The remaining part of Frivaldszky's Chrysididae was later studied by Mocsáry (1882, 1889). Three species were named after him: *Elampus frivaldszkyi* (Förster, 1853), *Chrysis frivaldszkyi* Mocsáry, 1882 and *Hedychrum frivaldszkyi* Mocsáry, 1889. Most of the specimens collected by him were collected during faunistic explorations carried out in the Carpathian Basin, in the Balkans and in the western part of Anatolia (Bálint 2002).

The most important expansion of the Chrysididae and Hymenoptera Collection began with Sándor (Alexander) Mocsáry (Figure 1), who was born on September 27, 1841 in Oradea (Nagyvárad), currently in Romania, and died on December 26, 1915 in Budapest. In 1870 the Department of Zoology became a separate entity, and Mocsáry was appointed as assistant curator. He organized the collection by taxonomical order and by geographic regions, and separated material from the Carpathian Basin from the rest of the collection. Mocsáry was the first hymenopterist of the museum, the first to separate the Hymenoptera Collection from the other Insect Collections, and became the director of the HNHM collection during his highly meritorious career. Throughout his 44-year service at the museum, he made the Hymenoptera Collection in HNHM recognized worldwide.



FIGURE 1. Sándor (Alexander) Mocsáry (by courtesy of HMNH).

Mocsáry was primarily involved in the research of the cuckoo wasps (Chrysididae) and spider wasps (Pompilidae) and published about 180 articles (Viereck 1922). Under Mocsáry's guidance, the Hymenoptera collection expanded rapidly, and by the end of 1902 it had accounted for 42,000 specimens belonging to 14,000 species. His outstanding career has been already described in various articles (e.g. Csiki 1910, 1911, 1916; Anonym 1911; Mocsáry 1912c; Soldanski 1916; Viereck 1922; Musgrave 1932; Móczár 1967c; Szelei 1971; Bohart & French 1986; Okáli *et al.* 1996; Kutzscher & Taeger 1998; Papp 2002; Haris 2016) and we here focus only on his chrysidid studies.

Mocsáry contributed more than any other author to our knowledge of Chrysididae. He described 650 species and varieties of Chrysididae (Kimsey & Bohart 1991) and was the most active chrysidologist of his times. Only W. Linsenmaier (Rosa *et al.* 2015b), in recent times, described more taxa. According to Kimsey & Bohart (1991: 3), "the majority of his 650, or more, new species names are still valid". But an accurate examination of their catalogue and following publications (with species resurrected) shows that only the 55% of the species names are currently considered as valid. Nevertheless, a deeper analysis is needed, because many extra Palaearctic species described by Mocsáry and later synonymised could be considered as valid species afterwards.

Mocsáry's monumental monograph "Monographia Chrysididarum Orbis Terrarum Universi (1889)" was a real landmark for the study of Chrysididae, and it is currently in use. In fact, if Dahlbom (1854) is considered as the first reviser of the family (Rosa & Vårdal 2015), Mocsáry was the first modern reviser of the Chrysididae, including also the subfamily Amiseginae. He studied most of the available types in the European collections and exchanged specimens with specialists from all over Europe, Russia, North America and South Africa. Moreover, he carefully studied all the known species and original descriptions, provided the first synonymic study (1887b), and finally described new genera, subgenera and species in a modern way (1889).

Mocsáry's monograph (1889) updated Dahlbom's work (1854), including all the known taxa in that time and, most of all, the original descriptions of the species that he could not personally study. For this reason, Mocsáry's monograph (1889) was widely in use until the arrival of the internet era, when almost all the original descriptions became freely and easily available to everyone. His classification was followed by all the museum curators and, with a few exceptions, many collections are still arranged following his classification (e.g. Berlin, Krakow and Vienna).

Mocsáry limited his collecting activities to Hungary, but he was able to receive, examine and exchange chrysidids from all over the world, thanks to his correspondence with other colleagues and private entomologists. In particular, along the years he received specimens and types from various museums (Athens, Berlin, Bremen, Dresden, Geneva, Genoa, Halle, Innsbruck, Leiden, London, Munich, Paris, Vienna, Warsaw (Eversmann's types currently in Krakow), Zurich) and private entomologists (e.g. S.F. Aaron (USA), E. Abeille de Perrin (Paris, France), E. André (Paris, France), C.F. Baker (Los Baños, Philippines), C.T. Bingham (England, Indian chrysidids), H. Brauns (Cape Town, South Africa), R. du Buysson (Paris, France), K.W. Dalla Torre (Innsbruck, Austria), H. Dewitz (Berlin, Germany), A. Ducke (Belém, Brazil), L. Fea (Genoa, Italy), L. Fairmaire (Paris, France), E. Frey-Gessner (Geneva, Switzerland), H. Friese (Schwerin, Switzerland), H. Fruhstorfer (Munich, Germany), R. Gasperini (Split, Croatia), A. Handlirsch (Vienna, Austria), P. Herbst (South America), L. Hiendlmayr (Munich, Germany), W. Kirby (London, England), M. Korb (Munich, Germany), J. Kriechbaumer (Munchen, Germany), F. Kohl (Vienna, Austria), A. Korlević (Rijeka, Croatia), T.J. Krüper (Athen, Greece), J. Lichtenstein (Montpellier, France), P. Magretti (Milan, Italy), G. Meade-Waldo (South Africa), L. Młokosiewicz (Warsaw, Poland), Ferdinand F. Morawitz (St. Petersburg, Russia), F.D. Morice (Oxford, England), L. Péringuey (Cape Town, South Africa), O. Radoszkowski (Warsaw, Poland), C. Ribbe (Berlin, Germany), H. Rolle (Berlin, Germany), H. de Saussure (Geneva, Switzerland), J. Sauter (Taiwan), S. Schenkling (Berlin, Germany), O. Schmiedeknecht (Blankenburg, Germany), A. von Schulthess-Rechberg (Zurich, Switzerland), A. Semenov-Tian-Shanskij (St. Petersburg, Russia), F. Sickmann (Iburg, Germany), R.E. Turner (South Africa), L. Wollmann (St. Petersburg, Russia), W. Wüstnei (Copenhagen, Denmark)). Other material was collected by Hungarian entomologists, such as Gy. Almásy (chrysidids from Central Asia), L. Bíró (Crete, Australia, India, Papua New Guinea, Tunisia), C. Katona (Africa), E. Csiki (Russia), K. Kertész, E. Kovács, B. Kuthy, F. Náday, and J. Pável. At the end of the XIX century, during the Habsburg Austro-Hungarian period, the postal system was working perfectly and the diplomatic relationships with Russia after 1873 (League of the Three Emperors) even permitted an easy interchange of insects with Russian entomologists. In the second half of 1880, Mocsáry cooperated intensively with O. Radoszkowski, one of the founders of the Russian Entomological Society (Rosa et al. 2015e). Mocsáry's

monograph (1889) would have been impossible to be carried out without the exchange and loan of specimens from the European museums, as shown in its introduction. Convenient exchanges were even carried out with S.F. Aaron (1885), who sent samplings of all available North American chrysidids, including syntypes described in his revision of the North American chrysidids. Mocsáry also acquired the chrysidid collection of C.T. Bingham (Mocsáry 1911b, 1912b), including types by Bingham and Nurse. Other international interchanges occurred with A. Ducke (Belém, Brazil), C.F. Baker (Los Baños, Philippines) and H. Brauns (Cape Town, South Africa). The good interchange system in Europe at the end of the XIX century was testified also by du Buysson (1891–1896) who could examine all Radoszkowski's types and material originating from many European collections as well.

Something changed after the publication of the *Monographia Chrysididarum* (1889). Mocsáry still received hundreds of chrysidids from all over the world, but slowly broke off or limited his contacts with some chrysidologists, in particular with R. du Buysson, after the publication of his monograph on European and Algerian chrysidids (du Buysson 1891–1896). For this reason, his last articles were not so accurate and generated some synonymies (Kimsey & Bohart 1991).

Many Hymenoptera were named after Mocsáry, and eight Chrysididae species bear his name: *Elampus mocsaryi* Radoszkowski, 1887; *Chrysis mocsaryi* Radoszkowski, 1889; *Spintharina mocsaryi* (Radoszkowski, 1890); *Cleptes mocsaryi* Semenov, 1891; *Amisega mocsaryi* Ducke, 1902; *Allocoelia mocsaryi* (Brauns, 1903); *Primeuchroeus mocsaryi* (Bischoff, 1910) and *Chrysis mocsariana* Semenov, 1912.

László Móczár (Figure 2), born on December 10, 1914 in Hungary, Kiskunfélegyháza, and died on July 3, 2015 in Budapest, was an outstanding figure in Hymenoptera research in Hungary. L. Móczár, son of Miklós Móczár, another famous Hungarian hymenopterologist, joined the collection staff of the HNHM in 1937. After World War II he became a prisoner of war, returned to HNHM in 1946 and remained there until 1969. In 1970 he was appointed as professor in the Department of Zoology at the University of Szeged (Móczár 1967c; Tanács 2014; Vas 2015; Haris 2016).



FIGURE 2. László Móczár (by courtesy of HMNH).

L. Móczár was an internationally renowned expert of aculeate wasps. He was mainly interested in the cuckoo wasp subfamily Cleptinae, the spider wasp subfamily Ceropalinae, and the family Bethylidae. His considerable effort in communicating science enabled the succeeding generations to get close to the world of insects, especially hymenopterans. He remained active in entomology until the last days of his life when aged over 100. Barbosa & Azevedo (2014) named a new genus of Bethylidae after him and a species was dedicated to his 100th birthday, *Moczariella centenaria*. He was an active chrysidologist and increased significantly the Chrysididae collection of the Museum, mostly with material collected in Hungary at: Kőszeg, Lake Balaton region, Mecsek Mountains, Bugac, Bátorliget, Kosice (Kassa) region, *etc*. He also exchanged chrysidid material chrysidids with K. Kusdas, M.N. Nikol'skaya, J. Schmidt, M. Schwarz, S. Zimmermann, and he was a good friend of Walter Linsenmaier.

During his entomological career, he described 30 species and subspecies of Chrysididae, wrote the Fauna Hungariae (Móczár 1967b), many important revisions (Móczár 1964a, 1964b, 1965) and important biological observations (Móczár 1961). Finally he was the main revisor of the subfamily Cleptinae (Móczár 1996a, 1996b, 1997a, 1997b, 1998a, 1998b, 1998c, 2000a, 2000b, 2001, 2009). Many Hymenoptera, also Coleoptera and Diptera, were named after László Móczár and Walter Linsenmaier named after him two chrysidid species: *Chrysis moczari* Linsenmaier, 1968 and *Cleptes moczari* Linsenmaier, 1968.

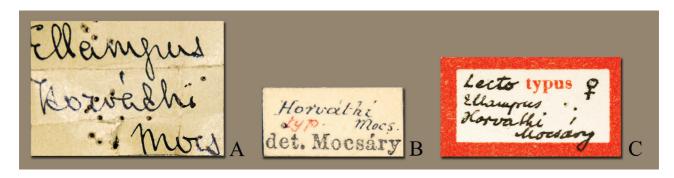


FIGURE 3. A. Handwritten label by S. Mocsáry; B. Semiprinted label by K. Pável; C. Handwritten label by L. Móczár.

Over the years, the Mocsáry Chrysididae collection was deeply modified at least twice. The first time after Mocsáry's death, when all the original handwritten labels by Mocsáry (Fig. 3A) were removed and substituted by semi-printed labels partially handwritten by the technician Konstancia Pável (Fig. 3B). The photograph of the handwritten label by Mocsáry published in Horn & Kahle (1935–1937) is erroneous (p. 524, pl. VII, fig. 69); whereas the photographs of the original handwritten labels written by Mocsáry are in Rosa (2009) and Rosa et al. (2015e). The second time was even more invasive: a previous curator decided to dismantle the collections (Mocsáry's Chrysididae collection and the Hungarian Chrysididae collection) as left by Mocsáry and Móczár and reordered them according to the classifications proposed by Kimsey & Bohart (1991), losing the original organization left by Mocsáry, so precious for anyone studying his works. As a consequence, different species were merged together according to the synonymic lists proposed by the American authors. Since at the time there was no expert on Chrysididae in the museum, many errors happened in the interpretation of species, subspecies, varieties, and species names (e.g. homonyms, taxa resurrected, etc.) and the result is that the collection is currently in a chaotic status, following no classification (e.g. specimens belonging to genus Euchroeus Latreille, can be found in the genus Brugmoia, Chrysis and Euchroeus) or alphabetical order (many taxa are mixed and not in order). Thanks to the collection database made by the technicians J. Domonkos, Zs. Papp, and P. Szöllősi-Tóth, all the species have been recorded in this database and types can be easily found; nevertheless, the original interpretations by Mocsáry and his classification (important for comparing species according to his articles) are now lost. In case of important and historical collections, it would be better to preserve the original order left by the author, rather than disassemble and reorder the collection following different authors with different opinions and systematic approach (Rosa et al. 2015b) to make it easy to examine types and other specimens as identified by the author of the collection. The collection is still a fundamental base for the study of this family and in the past years it was studied

by R.M. Bohart, L.S. Kimsey, K.V. Krombein, W. Linsenmaier, O. Niehuis, P. Rosa, V. Soon, F. Strumia, and N-S. Wei.

Material and methods

Terminology and classification of the genera follow Kimsey & Bohart (1991). The definitions of holotype, neotype, lectotype etc. are used according to the International Code for Zoological Nomenclature (ICZN 1999), fourth edition. Mocsáry often described new species without providing the number of specimens examined. We here follow the interpretation of "holotype" status already given by the previous authors (e.g. Móczár 1964a, 1964b, 1965, 1967a, 1997a, 1998c; Kimsey & Bohart 1991). We prefer to conserve the status of "holotype" given by other authors, rather than consider all the doubtful holotypes as lectotype by inference of holotype according to Code of Zoological Nomenclature (ICZN, Art. 74.6). When necessary, we added comments on the type series in the section "Remarks".

This catalogue deals with Palaearctic types and is arranged by subfamilies (Cleptinae and Chrysidinae) and tribes (Chrysidini, Elampini and Parnopini); species are listed alphabetically within subfamilies (Cleptinae) and tribes (Chrysidinae) and the following data are given: type locality; category of the type; number and sex of specimens; complete labels, a single slash reveals the information handwritten on the reverse side of the label and labels are separated from each other by double slash; remarks and current systematic placement. The "Current status" for each species is given according to Móczár's (1997a, 1997b, 1998a, 1998b, 1998c, 2000a, 2000b, 2001) catalogues for Cleptinae and Kimsey & Bohart's (1991) catalogue for Chrysidinae; in case of different interpretation we provide the author citation (e.g. Linsenmaier 1959a, 1968, 1997; etc.).

Generic names are abbreviated in the text. *Elampus* Spinola, 1806 is abbreviated in *El.*, whereas *Ellampus* sensu auctorum (incorrect emendation of *Elampus*) is abbreviated in *Ell.* At Mocsáry's time the name *Ellampus* was used in place of *Omalus* Panzer, 1801. Mocsáry (1889) included in the genus *Ellampus* four subgenera: *Diplorrhos* Aaron, 1885 (currenlty *Philoctetes* Abeille de Perrin), *Ellampus* s. str., *Notozus* Förster, 1853 (currently *Elampus* Spinola) and *Philoctetes* Abeille de Perrin, 1879.

Abbreviations used in the text are as follows: **F1**, **F2**, **F3**, *etc*. = flagellomere 1, flagellomere 2, flagellomere 3 and so on; **I/w** = length/width; **MOD** = mid ocellar diameter; **OOL** = oculo-ocellar distance; **T1**, **T2**, and **T3** = metasomal tergum 1, tergum 2, and tergum 3; **TFC** = transverse frontal carina.

Photographs of the types were taken with Nikon D-80 connected to the stereomicroscope Togal SCZ and stacked with the software Combine ZP. The white calibration of the photocamera was applied to reduce the blue effect of fluorescent light of the Togal microscope.

Types and other specimens are deposited or have been examined from the following institutions:

BME Bohart Museum of Entomology, University of California, Davis, USA.

BZL Biologiezentrum, Linz, Austria.

HNHM Magyar Természettudományi Múzeum Budapest, Hungary.

ISEA-PAN Invertebrate collections of the Institute of Systematics and Evolution of Animals, Polish Academy of

Sciences in Kraków, Poland.

MNHU Museum für Naturkunde, Berlin, Germany.

MSNG Museo Civico di Storia Naturale "G. Doria", Genoa, Italy.

NHMW Naturhistorisches Museum Wien, Vienna, Austria. NHRS Naturhistoriska Riksmuseet, Stockholm, Sweden.

NMLS NaturMuseum Luzern, Switzerland.

ZISP Zoological Institute, St. Petersburg, Russia.

ZMMU Zoological Museum of Moscow Lomonosov State University, Russia.

Results

We have found 393 Palaearctic types (93 holotypes, 32 paratypes, 3 allotypes, 66 lectotypes, 177 paralectotypes, 18 syntypes and 4 neotypes) housed at the Magyar Természettudományi Múzeum, belonging to 204 taxa (27 Cleptinae and 177 Chrysidinae (122 Chrysidini, 52 Elampini, 3 Parnopini)). We also found that about 90 specimens previously labelled as "types" do not belong to type series and their status is discussed in the following paragraphs: Specimens labelled as "type" but not part of type series and Final considerations.

Subfamily Cleptinae

Cleptes abeillei soror Mocsáry, 1893

Cleptes Abeillei var. soror Mocsáry 1893: 213.

Type locality. Greece: "Graecia (Mus. Hung.)".

Holotype, ♀: Graecia Krüp. 92 // *Abeillei* Buyss. v. *soror* typ. det. Mocsáry // Holotypus *Cl. abeillei* var. *soror* Mocsáry ♀ // *Cleptes aerosus* Foerst. det. Hym. Typ. Bo.3853 Móczár // id. nr. 134779 HNHM Hym. coll..

Remarks. It belongs to the *aerosus* species-group and was included in the subgenus *Holcocleptes* Móczár, 1962 by Móczár (1962).

Current status. Cleptes aerosus Förster, 1853 (synonymised by Móczár 1998c).

Cleptes aerosus Förster, 1853

Cleptes aerosus Förster 1853: 329.

Type locality. Hungary: "Ungarn".

Holotype, ♂: Hung. // Budapest leg. Kovács // 945 // 440 - 24 // *Cleptes aerosus* Först. det. Mocsáry // Praep. Genit. Clept. n°24 // Holotypus ♂ *Cleptes aerosus* Förster det. Móczár 994 // Hym. Typ. No. 3852 Mus. Budapest // id nr. 134740 HNHM Hym. coll..

Remarks. Móczár (1962: 118) designated the lectotype based on this specimen; later, Móczár (1998c: 333) changed the status to holotype. We follow the last interpretation given by Móczár (1998c), even if the author did not provide any explanation to justify this change; we observe that the lectotype designation was not against ICZN rules. It is partially damaged. It lacks left antenna, left meso- and metalegs, and some tarsi of the remaining legs. *Cleptes aerosus* is the type-species of the subgenus *Holcocleptes* Móczár, 1962 and belongs to the *aerosus* speciesgroup.

Current status. Cleptes aerosus Förster, 1853.

Cleptes anatolensis Móczár, 2001

Cleptes (Cleptes) anatolensis Móczár 2001: 913.

Type locality. Turkey: "Burdur Anatol. NW Bucak 900 m 31.V. 1961 leg. F. Ressl, Holotypus Clept. anatolensis & det Móczár 2000, Hym. Typ. No. 3861 Mus. Budapest (genitalia: on the label of the specimen), 1 & holotype (Budapest); As. Türkei S. Aydintar 28-29.V.83 leg. Rausch, Paratypus & Clept. anatolensis det Móczár 2000, Hym. Typ. No. 3862 Mus. Budapest, (genitalia separated on glass)".

Holotype, ♂: Burdur Anatol. NW Bucak 900 m 31.V. 1961 leg F. Ressl // nahe *libanoticus* spec.? Coll. Linsenmaier // Holotypus *Clept. anatolensis* ♂ det Móczár 2000 // Hym. Typ. No. 3861 Mus. Budapest // id nr. 134790 HNHM Hym. coll..

Paratype, 1♂: As. Türkei S. Aydintar 28-29.V.83 leg. Rausch // Paratypus ♂ *Clept. anatolensis* det Móczár 2000 // Hym. Typ. No. 3862 Mus. Budapest // id nr. 134789 HNHM Hym. coll..

Remarks. The paratype is badly damaged; mesosoma and metasoma are broken and glued on the label. The collector of the holotype is Ressl and not Rossi, as given in the original description. *Cleptes anatolensis* belongs to the *semiauratus* species-group.

Current status. Cleptes anatolensis Móczár, 2001.

Cleptes apollon Arens, 2014

Cleptes apollon Arens 2014: 563.

Type locality. Greece: "Peloponnes, Andritsena, Vassae-Tempel".

Paratype, 1♂: Hellas: Peloponnes Andritsena; Vassae-T. 15.7.2007 leg. Werner Arens // am Boden über/auf trockenem Eichenlaub mit Schaben darin // Paratypus ♂ *Cleptes apollon* Arens det. W. Arens 2014 / id nr. 115592 HNHM Hym. coll..

Remarks. Cleptes apollon belongs to the satoi species-group.

Cleptes aurata Dahlbom, 1845

Cleptes aurata Dahlbom 1845: 2, nom. praeocc. nec Panzer, 1798.

Cleptes dahlbomi Semenov-Tian-Shanskij 1920: 306. Replacement name for Cleptes aurata Dahlbom, 1845 nom. praeocc. nec Panzer 1798.

Type locality. Turkey: "Bosfor".

Neotype, ♀: Jerusalem 16.V.46 Palestine Houska lgt. // *Cleptes auratus* ? det. Zimm. // Neotypus *Clept. dahlbomi* Sem. des. Móczár 1998 // *Cleptes dahlbomi* Sem. ♀ det. L. Móczár, 2001 // Hym. Typ. No. 3859 Mus. Budapest // id nr. 134761 HNHM Hym. coll..

Remarks. Móczár (1998c: 512) designated the neotype, because the holotype in NHRS is lost (Rosa & Vårdal 2015). Kimsey & Bohart (1991: 64) placed *Cleptes dahlbomi* in synonymy with *Cl. semiauratus* (Linnaeus, 1761). *Cleptes dahlbomi* is one of the most noteworthy species found in the Middle-East and belongs to the *dahlbomi* species-group (Móczár 1998c). It is the type-species of the subgenus *Maculosicleptes* Móczár, 1998.

Current status. Cleptes dahlbomi Semenov-Tian-Shanskij, 1920.

Cleptes caucasicus Semenov-Tian-Shanskij, 1920

Cleptes caucasicus Semenov-Tian-Shanskij 1920: 322.

Type locality. Georgia: "Transcaucasia centralis; prov. Tiflisensis: Kodzhory (W. Raciborski 5, 9, 11, 20. VIII. 1913)".

Paralectotypes, 1♂: [p. Kodzhory Tiflis Gubernia 5.VIII.13 V.A. Raciborski] [in Russian] // Cleptes caucasicus m. ♂ typ. A. Semenov-Tian-Shansky det. VIII.18 // Coll. A. Semenov-Tian-Shansky // Paratypus // Paralectotypus ♂ Cleptes caucasicus Semenov des. Móczár 995 // id. nr. 134773 HNHM Hym. coll.; 1♂: [p. Kodzhory Tiflis Gubernia 5.VIII.13 V.A. Raciborski] [in Russian] // Cleptes caucasicus m. ♂ aberr. typ. A. Semenov-Tian-Shansky det. VIII.18 // Coll. A. Semenov-Tian-Shansky // Paratypus // Paralectotypus ♂ Cleptes caucasicus Semenov des. Móczár 1995 // Hym. Typ. No. 3838 Mus. Budapest // id. nr. 134775 HNHM Hym. coll.

Remarks. Móczár (1997a: 34) designated the female lectotype deposited at ZISP (Georgia: Kodzhory, Tifli, 9.viii.1913, leg. V.A. Raciborski). The specimen is damaged. It lacks left pro-, meso- and metalegs, left antenna and right flagellum. It belongs to the *nitidulus* species-group, included in the subgenus *Leiocleptes* Móczár, 1962 by Móczár (1997a).

Current status. Cleptes splendidus (Fabricius, 1794) (synonymised by Móczár 1998b).

Cleptes consimilis du Buysson, 1887

Cleptes consimilis du Buysson 1887: 198.

Type locality. France: "J'ai pris deux exemplaires du Cl. consimilis dans les environs du Vernet, commune de Brot-Vernet (Allier), sur des ombelles de Peucedanum cervaria Lap., les 21 et 31 juillet 1887".

Paralectotype, 1♂: Brot-Vernet R. du Buysson / *Cl. consimilis* Buyss. ♂ de *Cl. Chyzeri* Mocs. / *Cleptes Chevrieri* Frey. det. Mocsáry / Paralectotypus ♂ *C. consimilis* Buyss. des. Móczár 95 / Hym. Typ. No. 3844 Mus. Budapest / id. nr. 134774 HNHM Hym. coll..

Remarks. du Buysson (1887) described *Cleptes consimilis* based on two specimens. Kimsey & Bohart (1991: 60) considered the syntype deposited at MNHN as the holotype. This erroneous definition does not automatically designate the lectotype by inference of holotype (ICZN 1999: Article 74.5). The second syntype is housed in HNHM. Móczár (1997a: 35) designated the specimen in MNHN as the lectotype. *Cleptes consimilis* belongs to the *nitidulus* species-group, included in the subgenus *Leiocleptes* Móczár, 1962 by Móczár (1997a).

Current status. Cleptes splendidus (Fabricius, 1794) (synonymised by Móczár 1997b).

Cleptes dauriensis Móczár, 1997

Cleptes (Cleptes) dauriensis Móczár 1997a: 36.

Type locality. Russia: "Southeast Russia: "Dauria", F. Sahlb., Cleptes n. sp. nitidulo Fbr. aff.".

Holotype, ♀: Dauria // F. Sahlb. // *Cleptes* n. sp. *nitidulus* Fbr. aff. // Holotypus *Cleptes dauriensis* n. sp. ♀ Móczár det. Móczár 995 // Hym. Typ. No. 3845 // id. nr. 134763 HNHM Hym. coll..

Remarks. The mesosoma is badly damaged by the pin, and the diagnostic characteristics on mesonotum are not visible. *Cleptes dauriensis* belongs to the *nitidulus* species-group, included in the subgenus *Leiocleptes* Móczár, 1962 by Móczár (1997b).

Current status. Cleptes dauriensis Móczár, 1997.

Cleptes diana Mocsáry, 1889

Cleptes Diana Mocsáry 1889: 46.

Type locality. Greece: *Graecia (Cumani in paeninsula Morea, Mus. Hung.)*.

Holotype, ♂: Morea Cumani Brenske // *Diana* Mocs. <Mocsáry's handwriting > // *Diana* Mocs. typ. det Mocsáry // Praep. gen. *Clept.* No. 37 // Holotypus *Cleptes Diana* Mocsáry // Hym. Typ. No. 3867 Mus. Budapest // id nr. 134796 HNHM Hym. coll..

Remarks. The body is partially damaged and different parts are glued together; it lacks right wings, partially antennae and right metatibia; T5 broken. It belongs to the *semiauratus* species-group.

Current status. Cleptes semiauratus (Linnaeus, 1761) (synonymised by Rosa et al. 2015c).

Cleptes femoralis Mocsáry, 1890

Cleptes femoralis Mocsáry 1890: 47.

Type locality. Turkey: "Brussa [= Bursa] in Asia minore (Mus. Hung.)".

Holotype, ♂: Asia min. // Brussa // 868 - 4 // Holotypus *Cl. femoralis* Mocsáry // Hym.Typ. No. 3846 Mus. Budapest // *Cleptes femoralis* Mocs. det. L. Móczár, 1995 // id. nr. 134767 HNHM Hym. coll..

Remarks. Cleptes femoralis Mocsáry, 1890 was placed in synonymy with Cl. nitidulus (Fabricius, 1793) by Kimsey & Bohart (1991: 62) and reinstated by Móczár (1997a: 37). It belongs to the nitidulus species-group.

Current status. Cleptes femoralis Mocsáry, 1890.

Cleptes hungaricus Móczár, 2009

Cleptes (Leiocleptes) hungaricus Móczár 2009: 134.

Type locality. Hungary: "Female holotype: Hungary: Pilisborosjenõ, 10.VII.2008, leg. J. Muskovits; 2 paratypes, females, with the same data. Further female paratypes: Pilisborosjenõ, 20.VII.2008, leg. J. Muskovits, Sóskút, 12.VII.2008, leg. J. Muskovits. Holotype: Budapest Hym. Typ. No. 3781, paratypes Nos 3782–3784 (HNHM). One paratype with the data identical with the holotype is deposited in the private collection of J. Muskovits (Budapest)".

Holotype, ♀: Pilisborosjenõ 2008.07.20 dr. Muskovits // Holotypus *Cleptes hungaricus* n. sp. Móczár 2009 ♀ // Hym. Typ. No. 3781 Mus. Budapest // 4. // id nr. 134753 HNHM Hym. coll..

Paratypes, 1♀: Pilisborosjenõ 2008.07.20 dr. Muskovits // Paratypus *Cleptes hungaricus* n. sp. Móczár 2009 ♀ // Hym. Typ. No. 3785 Mus. Budapest // 2. // id nr. 134751 HNHM Hym. coll.; 1♀: Pilisborosjenõ 2008.07.20 dr. Muskovits // Paratypus *Cleptes hungaricus* n. sp. Móczár 2009 ♀ // Hym. Typ. No. 3783 Mus. Budapest // 1. // id nr. 134752 HNHM Hym. coll.; 1♀: Sóskút 2008.07.12 dr. Muskovits // Paratypus *Cleptes hungaricus* n. sp. Móczár 2009 ♀ // Hym. Typ. No. 3784 Mus. Budapest // 5. // id nr. 134754 HNHM Hym. coll..

Remarks. One paratype (id nr. 134751) is markedly abnormal, with enlarged and entirely metallic metasoma. *Cleptes hungaricus* belongs to the *nitidulus* species-group.

Current status. Cleptes hungaricus Móczár, 2009.

Cleptes ignidorsum Móczár, 1998

Cleptes (Holcocleptes) ignidorsum Móczár 1998a: 335.

Type locality. Georgia: "Gruzia: Prov. Tiflisens. Lagodechi, 30.V.07".

Holotype, ♂: Lagodechi // Mus. Caucas 60-07 // Holotypus ♂ *Cleptes ignidorsum* sp. n. det. Móczár 997 // 134781 HNHM Hym. coll..

Remarks. The type lacks the left antenna. *Cleptes ignidorsum* Móczár belongs to the *aerosus* species-group and was included in the subgenus *Holcocleptes* Móczár, 1962 by Móczár (1998a).

Current status. Cleptes ignidorsum Móczár, 1998.

Cleptes ignitus scutellaris Mocsáry, 1889

Cleptes ignitus var. scutellaris Mocsáry 1889: 53.

Type locality. Austria and Hungary: "Hungaria septentrionali-occidentalis (Mus. Hung.); Austria ad Vindobonam [= Vienna] (Coll. Schultess-Rechbergi! et Mus. Vindob.!)".

Lectotype, ♀: Nyitra Mocsáry 1886 aug // *scutellaris* Mocs. Typ. det. Mocsáry // Lectotypus *Cl. ignitus* var. *scutellaris* Mocsáry // *Cleptes* ♀ *scutellaris* Mocs. det. Móczár 1965 // Hym. Typ. No. 3849 Mus. Budapest // id nr. 134755 HNHM Hym. coll..

Remarks. Móczár (1962: 121) designated the lectotype. The type lacks the right proleg and some flagellomeres of the left antenna. *Cleptes scutellaris* Mocsáry, 1889 was raised to species rank by Mocsáry (1890). The paralectotype deposited at NHMW was not found. It belongs to the *nitidulus* species-group and was included in the subgenus *Leiocleptes* Móczár, 1962 by Móczár (1997a).

Current status. Cleptes scutellaris Mocsáry, 1889.

Cleptes jordanicus Linsenmaier, 1968

Cleptes jordanicus Linsenmaier 1968: 4.

Type locality. Jordan and Turkey: *Jordanien*, *& Type*, *leg. Klapperich V.63*, *in Coll. m. - Kleinasien*, *Antakya*, *&& Paratypen in Coll. Gusenleitner, Schmidt*, *Schwarz* [BZL] *und m.* [NMLS].

Paratypes, 1 ♂: Türkei Antakya 6.VI.1965 leg. M. Schwarz // ♂ Paratype *Cleptes* Ltr. *jordanicus* Lins. Linsenmaier det. 1965 // Paratypus *Clept. jordanicus* Linse. det. Móczár // Hym. Typ. No. 3863 Mus. Budapest // id nr. 134791 HNHM Hym. coll. // 6; 1 ♂: Antakya As. Türk. 4.VI.1965 leg. Jos. Schmidt // ♂ Paratype *Cleptes* Ltr. *jordanicus* Lins. Linsenmaier det. 1965 // LI egg. 89 ex. coll. J. Schmidt // red label // Paratypus *Clept. jordanicus* Lins. det. Móczár // Hym. Typ. No. 3865 Mus. Budapest // id nr. 134792 HNHM Hym. coll. // 6.

Remarks. Holotype deposited at NMLS. *Cleptes jordanicus* Linsenmaier belongs to the *semiauratus* speciesgroup.

Current status. Cleptes jordanicus Linsenmaier, 1968.

Cleptes juengeri Linsenmaier, 1994

Cleptes juengeri Linsenmaier 1994b: 514.

Type locality. Spain: "Spanien, Soria, am Duero auf Ferula, 9.7.1991; Paratypen: 99 wie Holotypus, 9

Paratype, 1 ♀: Spanien Soria 19.6.94 Linsenmaier // ♀ Paratype *Cleptes* Latr. *juengeri* Linsenmaier det. 1994 // Paratypus *Cl. juengeri* Linsenm. // Hym. Typ. No. 3856 Mus. Budapest / id nr. 134787 HNHM Hym. coll..

Remarks. Holotype deposited at NMLS. *Cleptes juengeri* belongs to the *juengeri* species-group and was included in the subgenus *Holcocleptes* Móczár, 1962 by Móczár (1998c). The male was described by Strumia (2004).

Current status. Cleptes juengeri Linsenmaier, 1994.

Cleptes kusdasicus Móczár, 1968

Cleptes (Leiocleptes) kusdasicus Móczár 1968: 368.

Type locality. Turkey: "Holotypus: Mut 275m, Asia min., 30.5.1967, leg. K. Kusdas, $1 \supseteq (Coll. K. Kusdas, Linz)$. Paratypus: mit gleichen Angaben, $1 \supseteq (Coll. Mus. Nat. Hung., Hym. Type Nr. 197)$.".

Paratype, 1♀: Mut 275m Asia min. 30.5.1967 leg. K. Kusdas // Paratypus ♀ *Cleptes (Leio-) kusdasicus* Móczár det. Móczár 1968 // Hym. Typ. No. 197 // id. nr. 134764 HNHM Hym. coll..

Remarks. The holotype is deposited at BZL. *Cleptes kusdasicus* belongs to the *nitidulus* species-group, and was included in the subgenus *Leiocleptes* Móczár, 1962 by Móczár (1997a).

Current status. Cleptes kusdasicus Móczár, 1968.

Cleptes margaritae Móczár, 2000

Cleptes (Cleptes) margaritae Móczár 2000b: 312.

Type locality. Tadijkistan [?]: Galifabad, 28. VIII. 40, Hym. Typ. No. 3860 (HNHM).

Holotype, ♀: Galifabad Tadzhikistan 28.VIII.40 // Holotypus *Cleptes margaritae* ♀ sp. n. Móczár 1999 // Hym. Typ. No. 3860 Mus. Budapest // id nr. 134799 HNHM Hym. coll..

Remarks. Cleptes margaritae belongs to the satoi species-group.

Current status. Cleptes margaritae Móczár, 2000.

Cleptes moczari Linsenmaier, 1968

Cleptes moczari Linsenmaier 1968: 4.

Type locality. Greece: "Griechenland, Alt-Korinth. $\ \$ 7 Type, $\ \$ 3 Allotype, leg. Schmidt V.63 in Coll. m. [NMLS] – Paratypen Museum Budapest, Coll. Schmidt und Coll. m. – Auch bei Tripolis.".

Paratypes, 1♀: Alt-Korinth Graecia 31.5.1963 leg. K. Kusdas // Paratype ♀ *Cleptes* Ltr. *moczari* Lins. Linsenmaier det. 1965 // Paratypus *Cleptes* ♀ *moczari* Lins. // Hym. Typ. No. 3854 Mus. Budapest // id nr. 134783 HNHM Hym. coll.; 1♂: Alt-Korinth Graecia 31.5.1963 leg. K. Kusdas // Paratype ♂ *Cleptes* Ltr. *moczari* Lins. Linsenmaier det. 1965 // Paratypus *Cleptes* ♂ *moczari* Lins. // Hym. Typ. No. 3855 Mus. Budapest // id nr. 134786 HNHM Hym. coll..

Remarks. Holotype deposited at NMLS. Other two females preserved in HNHM are labelled as paratypes (id nr. 134784 and 134785), but they are not types; they have been compared with a paratype and bear the labels: (a) Graecia Alt-Korinth Pelopon. 20.V.1964 leg. Max. Schwarz // Comp. w. ptype gr. (*Holco-*) 967 *moczari* Lins. det. L. Móczár (b) Graecia Alt-Korinth Pelopon. 3.VI.1963 leg. Max. Schwarz // Comp. w. ptype gr. (Holco-) 967 *moczari* Lins. det. L. Móczár). These two specimens were sent by M. Schwarz to Móczár for identification. *Cleptes moczari* belongs to the *aerosus* species-group, and was included in the subgenus *Holcocleptes* Móczár, 1962 by Móczár (1998c).

Current status. Cleptes moczari Linsenmaier, 1968.

Cleptes morawitzi Radoszkowski, 1877

Cleptes Morawitzi Radoszkowski 1877: 1.

Type locality. Kazakhstan and Uzbekistan: "*Habitat prope Maracandam, Taschkent et Tschardara*" [collected on the 5th, 12th, 13th and 19th of April 1869 at Samarkand; on the 3rd, 5th, 8th and 25th of April 1871 at Tashkent and Tschardara] [in Cyrillic].

Paralectotype (?), 1♂: Tashkent // Cleptes morawitzi Radoszk. typ. // Cleptes Morawitzi Rad. (Mocs. Mon., p.) A.[Andreas] S.[Semenov] VI.91 // Paralectotypus C. morawitzi Radoszk det. Mocsáry det. Móczár 995 // ♂ Cleptes caucasicus Sem. det. L. Móczár / id. nr. 134778 HNHM Hym. coll..

Remarks. This specimen is doubtfully considered as a paralectotype because it does not bear the typical locality label printed in Cyrillic by Fedstchenko as the other types examined, and it was identified by Semenov in 1891. Another male was recently labelled as a type, but it was simply compared with the lectotype by Móczár in 1995 and cannot be considered as a type; it bears the labels: Turkestan // *Cleptes morawitzi* Rad. det. Mocsáry // compared with *C. morawitzi* Rad. lectotype det. L. Móczár, 1995 // id. nr. 134777 HNHM Hym. coll.).

Cleptes morawitzi is the type-species of the subgenus Melanocleptes Móczár, 1962, later synonymised by Móczár (1997a) with the subgenus Leiocleptes Móczár, 1962; it belongs to the nitidulus species-group (Móczár 1997a).

Current status. Cleptes morawitzi Radoszkowski, 1877.

Cleptes muti Móczár, 1968

Cleptes (Zimmermannia) muti Móczár 1968: 369.

Type locality. Turkey: "Holotypus: Mut 275m, Asia min., 30.5.1967, leg. K. Kusdas, ♂ (Coll. Kusdas, Linz). Paratypen: mit gleichen Angaben, 1♂ (Coll. Mus. Nat. Hung. Hym. Typ. Nr. 198), 1♂ (Coll. Kusdas); mit gleichem Ort: 27.5.1967, 5♂ (Coll. Kusdas), 2♂ (Coll. Mus. Nat. Hung. Hym. Typ. Nr. 199-200)".

Paratypes, 1♂: Mut 275m Asia min. 30.5.1967 leg. K. Kusdas // Paratypus ♂ Cleptes (Zimmermannia) muti Móczár det. Móczár 1968 // Hym. Typ. No. 198 // = holotype // id. nr. 134768 HNHM Hym. coll.; 1♂: Mut 275m Asia min. 27.5.1967 leg. K. Kusdas // Paratypus ♂ Cleptes (Zimmermannia) muti Móczár det. Móczár 1968 // Hym. Typ. No. 199 // id. nr. 134769 HNHM Hym. coll.; 1♂: Mut 275m Asia min. 27.5.1967 leg. K. Kusdas // Paratypus ♂ Cleptes (Zimmermannia) muti Móczár det. Móczár 1968 // Hym. Typ. No. 200 // id. nr. 134770 HNHM Hym. coll..

Remarks. The holotype is housed in BZL. *Cleptes muti* belongs to the *nitidulus* species-group (Móczár 1997a); it was described in the subgenus *Zimmermannia* Móczár, 1962. Today this subgenus is synonymised under the subgenus *Leiocleptes* Móczár, 1962 (see Móczár 1997b)

Current status. Cleptes muti Móczár, 1968.

Cleptes nitidulus erdosi Móczár, 1951

Cleptes nitidulus var. erdősi Móczár 1951: 278.

Type locality. Hungary: "Hongrie: $1 \stackrel{\frown}{\hookrightarrow}$: Fajsz, 4.VIII.1943".

Holotype, ♀: Fajsz 1943.VIII.4 dr. Erdős // ♀ // Holotypus *Cleptes nitidulus* var. *erdősi* Móczár // *Cleptes semiauratus* Tourn. det. Móczár, 1995 // Hym. Typ. No. 3851 Mus. Budapest // id nr. 134749 HNHM Hym. coll..

Remarks. In HNHM there is a male collected on the same date, locality, collector, and labelled as allotype of *Cleptes elegans* Mocsáry in Mocsáry & Szépligeti, 1901 (id nr. 134750 HNHM Hym. coll.). This specimen is neither the allotype of *C. elegans*, because it was collected in 1943 after the original description, nor the allotype of *Cl. elegans* var. *erdosi*, which is described only on the female. Other ten specimens with the same locality label (Fajsz 1943.VIII.4 dr. Erdős) are deposited in the collection. It belongs to the *nitidulus* species-group, included in the subgenus *Leiocleptes* Móczár, 1962 by Móczár (1997a).

Current status. Cleptes semicyaneus Tournier, 1879 (synonymised by Móczár 1997a).

Cleptes nyonensis Móczár, 1997

Cleptes (Cleptes) nyonensis Móczár 1997a: 40.

Type locality. Switzerland: "Nyon, Chevr. collecti., Hym. typ. No 3848 Mus. Budapest".

Holotype, ♀: Nyon // Chevr. collect! // Holotypus *Cleptes nyonensis* ♀ Móczár det. Móczár 1995 // Hym. Typ. No. 3848 Mus. Budapest // id. nr. 134771 HNHM Hym. coll..

Remarks. The type locality Nyon is located in Switzerland and not in France, as given in the original description. The type is badly damaged, it lacks head and prolegs. *Cleptes nyonensis* belongs to the *nitidulus* species-group, and was included in the subgenus *Leiocleptes* Móczár, 1962 by Móczár (1997a).

Current status. Cleptes nyonensis Móczár, 1997.

Cleptes parnassicus Mocsáry, 1902

Cleptes Parnassicus Mocsáry 1902a: 339.

Type locality. Greece: Graecia (Mons Parnassus) (Mus. Hung.).

Lectotype, ♀: Mons Parnassus 27.9. // *Parnassicus* Mocs. typ. det Mocsáry // Lectotypus ♀ *Cleptes parnassicus* (L.D. French) Mocsáry // Lectotypus ♀ *Cleptes parnassicus* Mocsáry det Móczár 997 // Hym. Typ. No. 3868 Mus. Budapest // id nr. 134794 HNHM Hym. coll..

Paralectotype, 1 ♂: Mons Parnassus 27.9. // *Parnassicus* Mocs. typ. det Mocsáry // Paralectotypus ♀ (!) *Cleptes parnassicus* (L.D. French) Mocsáry // Paralectotypus ♀ *Cleptes parnassicus* Mocsáry det Móczár 997 // Praep. Genit. Clept. N 18 // Hym. Typ. No. 3869 Mus. Budapest // id nr. 134795 HNHM Hym. coll..

Remarks. French selected one female as the lectotype of *Cleptes parnassicus*, but this designation was not published. Kimsey (in Kimsey & Bohart 1991) designated the lectotype without pinning any label under the specimens and did not provide any further note on the specimen selected. Móczár (2001: 922) again designated the lectotype based on the same specimen selected by French, because there was no evidence that Kimsey examined the type series. The lectotype is damaged; it lacks left antenna, left meso- and metalegs, right metaleg and right wings, glued on a label. *Cleptes parnassicus* belongs to the *semiauratus* species-group.

Current status. Cleptes parnassicus Mocsáry, 1902.

Cleptes pronigritus Linsenmaier, 1968

Cleptes pronigritus Linsenmaier 1968: 6.

Type locality. Turkey: *Klein-Asien*. \supseteq *Type von Antakya, VI.65, leg. Schmidt, in Coll. m.* [NMLS] - \supseteq *Paratypen in Coll. Schmidt, Schwarz, Gusenleitner* [BZL] *und. m.* [NMLS].

Paratype (?), 1♀: Antakya As.Türk. 6.VI.1965 leg. Jos. Schmidt // Paralectotypus (!) *Cleptes* Ltr. *pronigritus* Lins. des. Mócz. // *Cleptes pronigritus* ♀ det. L. Móczár, 1999 // Hym. Typ. No. 3875 Mus. Budapest // id nr. 134804 HNHM Hym. coll..

Remarks. The holotype is housed in NMLS. The specimen in HNHM was collected by Schmidt together with the rest of the type series. However, it does not bear the typical handwritten type label by Linsenmaier. Very likely Schmidt sent some specimens to Linsenmaier and Móczár for identification, and Linsenmaier (1968) described it before Móczár. Then Móczár considered it as a paratype because matched the other specimens of the type series. The lectotype designation was not published. *Cleptes pronigritus* belongs to the *satoi* species-group.

Current status. Cleptes pronigritus Linsenmaier, 1968.

Cleptes elegans Mocsáry, 1901

Cleptes elegans Mocsáry in Mocsáry & Szépligeti 1901: 158.

Type locality. Russia: "Kazan".

Holotype, ♀: Rossia Kasan // Exp. Zichy leg. Csiki // *elegans* Mocs. Typ. det. Mocsáry // ♀ Holotypus *Cleptes elegans* Mocsáry det. Móczár 1951 // Hym. Typ. No. 3850 Mus. Budapest // id nr. 134748 HNHM Hym. coll..

Remarks. Móczár (1962: 119) designated the lectotype based on this specimen, later Móczár (1997a: 42) corrected the status into holotype. Nevertheless, Mocsáry (1901) described the species based on an unknown number of specimens and the lectotype designation was corrected. *Cleptes semicyaneus* belongs to the *nitidulus* species-group, and was included by Móczár (1998b) in the subgenus *Leiocleptes* Móczár, 1962.

Current status. Cleptes semicyaneus Tournier, 1879 (synonymised by Móczár 1998b).

Cleptes triestensis Móczár, 2000

Cleptes (Cleptes) triestensis Móczár 2000b: 321.

Type locality. Italy: *Triest IX 1.6.15*, "Cleptes spec. nov! Nur in einer Doline des Karstes bei Nabresina gefunden. **Holotype**, ♂: Triest IX 1-6/15 // Cleptes spec. nov! Nur in einer Doline des Karstes bei Nabresina gefunden // Cleptes nigritus Mercet det. Mocsáry // Praep. Gen. Clept. No. 20 // Holotypus ♂ Cleptes triestensis sp. n. Móczár 1999 // Hym. Typ. No. 3857 Mus. Budapest // id nr. 134805 HNHM Hym. coll..

Remarks. Strumia (2004) described the female. *Cleptes triestensis* belongs to the *satoi* species-group. **Current status.** *Cleptes triestensis* Móczár, 2000.

Cleptes turceyanus Linsenmaier, 1968

Cleptes turceyanus Linsenmaier 1968: 5.

Type locality. Turkey: "Klein-Asien. ♂ Type von Tarsus, leg. Seidenstücker IV.55, in Coll. m. [NMLS], ♂ Paratype, Antakya VI.65, leg. und Coll. Gusenleitner [BZL]".

Paratype, 1&: Antakya 1.-7.6. 1965 Anatolia leg. J. Gusenleitner // & Paratype *Cleptes* Latr. *turceyanus* Lins. Linsenmaier det 1965 // 1 // 11 // Hym. Typ. No. 3866 Mus. Budapest // id nr. 134797 HNHM Hym. coll..

Remarks. One male collected at Mut [Turkey] by Schmidt in 1967 and was labelled as paratype by Linsenmaier in 1973, after the description and cannot be considered as a type. It bears the following labels: Mut

Asia minor 27.-30.V.1967 leg. Jos. Schmidt // Paratype *Cleptes scutellaris turceyanus* Lins. det. Linsenmaier 73 // red label // *Cleptes (Leio-) femoralis* Mocs. det. L. Móczár, 997 // LI egg. 89 coll. J. Schmidt // id. nr. 134766 HNHM Hym. coll.. *Cleptes turceyanus* belongs to the *semiauratus* group.

Current status. Cleptes turceyanus Linsenmaier, 1968.

Subfamily Chrysidinae

Tribe Chrysidini

Chrysidea pumila atrata Zilahi-Kiss, 1915

Chrysidea pumila var. atrata Zilahi-Kiss 1915: 78.

Type locality. Hungary: "Hungaria orient.: Peér (Szilàgy m.)".

Lectotype, ♀: Peér Kiss // Typus // Holotypus *Chrys. pumila* var. *atrata* Zilahi-Kiss // id nr. 135650 HNHM Hym. coll..

Paralectotypes, 4♀♀: Peér Kiss // Paratypus *Chrys. pumila* var. *atrata* Zilahi-Kiss // id nr. 135651-135654 HNHM Hym. coll..

Remarks. Móczár (1964b: 448) designated the lectotype. *Chrysidea pumila* var. *atrata* is the melanic variation of *Ch. pumila*; the lectotype is entirely black and some paralectotypes are brown without any metallic reflection. This melanic colouration is commonly observed within *Ch. pumila* populations (pers. obs.).

Current status. Chrysidea pumila (Klug, 1845).

Chrysis abuensis Nurse, 1902

Chrysis abuensis Nurse 1902: 307.

Type locality. India: "Mt. Abu; common in September and October".

Syntypes, 1♀: Abu // Chrysis abuensis Nurse <handwritten by Nurse> // abuensis Bingham typ. // Chrysis abuensis Nurse det. Mocsáry // id nr. 115612 HNHM Hym. coll.; 1♀: Abu // abuensis Cotyp. Nurse // Chrysis abuensis Nurse det. Mocsáry // id nr. 115613 HNHM Hym. coll.; 3♀♀: Abu // abuensis Cotyp. Nurse // Chrysis abuensis Nurse det. Mocsáry // id nr. 115614, 115615 HNHM Hym. coll.

Remarks. Two syntypes are housed in BMNH, four in MNHN and one in NHMW.

Current status. Chrysis abuensis Nurse, 1902.

Chrysis adenica Mocsáry, 1912

(Plate 1A-1F)

Chrysis (Tetrachrysis) adenica Mocsáry 1912b: 549.

Type locality. Yemen: "Arabia: Aden 20.IV.1893; e collectione Chrysididarum eximia C. T. Bingham, nunc Musei Nationalis Hungarici propria (Mus, Hung.)".

Remarks. Kimsey & Bohart (1991: 455) synonymised *Chrysis adenica* Mocsáry, 1912 with *Ch. quadrispina* du Buysson, 1887 and later *C. adenica* was revalidated by Linsenmaier (1994a: 197). *C. quadrispina* has $OOL \le 1$ MOD, punctures on mesonotum with large polished intervals, larger punctures on metasoma, different shape of medial teeth distincly larger, triangular at base and very close, with V interval, different body coulouration, green with blue at base of T2 and T3 and median part of mesoscutum.

Current status. Chrysis adenica Mocsáry, 1912.

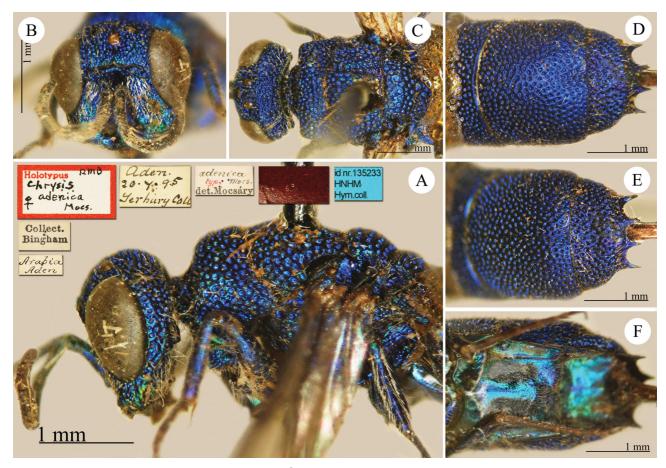


PLATE 1. *Chrysis adenica* Mocsáry, 1912, holotype ♀. **A**. Head and mesosoma, lateral view; **B**. Head, frontal view; **C**. Head and mesosoma, dorsal view; **D**. Metasoma, dorsal view; **E**. T2 and T3, posterior view; **F**. Metasoma, ventral view.

Chrysis alaica Mocsáry, 1912

(Plate 2A-2F)

Chrysis (Tetrachrysis) alaica Mocsáry 1912b: 588.

Type locality. Alai [mountain range in Kyrgyzstan and Tajikistan]: "*Turkestania: Montes Alai (Mus. Hung.)*". **Holotype,** ♀: Alai Turkest. // *alaica* Mocs. typ. det. Mocsáry // red label // Holotypus *Chrysis alaica* ♀ Mocs.

Holotype, $\ \downarrow$: Alai Turkest. // *alaica* Mocs. typ. det. Mocsary // red label // Holotypus *Chrysis alaica* $\ \downarrow$ Mocs RMB // id nr. 135398 HNHM Hym. coll..

Remarks. Chrysis alaica Mocsáry, 1912 belongs to the cerastes species-group and not to the ignita species-group as proposed by Kimsey & Bohart (1991), because of it's subcylindrical habitus, round head and apical margin of T3 shaped as in the female of *Ch. cerastes* Abeille and *Ch. mutabilis* du Buysson.

Current status. Chrysis alaica Mocsáry, 1912.

Chrysis amasina Mocsáry, 1889

(Plate 3A-3F)

Chrysis (Tetrachrysis) Amasina Mocsáry 1889: 495.

Type locality. Turkey: "Asia minor (Amasia [Amasya], Mus. Dresdense)".

Neotype, \cite{Q} (here designated): *Palestina //* Chrysis *amasina* Mocs. Det. Mocsáry // Ch. Amasina Mocs. Probablement la \cite{Q} de la C. verna Dahlb. // Neotypus \cite{Q} Chrysis amasina Mocsáry // id nr. 115610 HNHM Hym. coll..

Remarks. The type of *Chrysis amasina* has been destroyed during the bombing of Dresden in World War II. The neotype designation is needed because some French authors considered *Ch. amasina* as the female of *Ch. verna* Dahlbom, 1854. Even the type of *Ch. verna* is apparently lost. Kimsey & Bohart (1991: 476), without examination, placed it in Copenhagen, where it was not found by the first author and the curator (Lars Vilhelmsen, pers. comm.); Dahlbom (1854) described *Ch. verna* from specimens collected by Loew and later not found in any collection (London, Lund, Oxford, Stockholm, Vienna). According to the interpretation given by Linsenmaier (1959a) *Ch. amasina* belongs to the *rufitarsis* species-group, whereas *Ch. verna* to the *comparata* species-group. We follow his interpretation and designate the type of *Ch. amasina* based on the only specimen identified as *Ch. amasina* by Mocsáry in his collection and matching the original description.

Current status. Chrysis amasina Mocsáry, 1889.

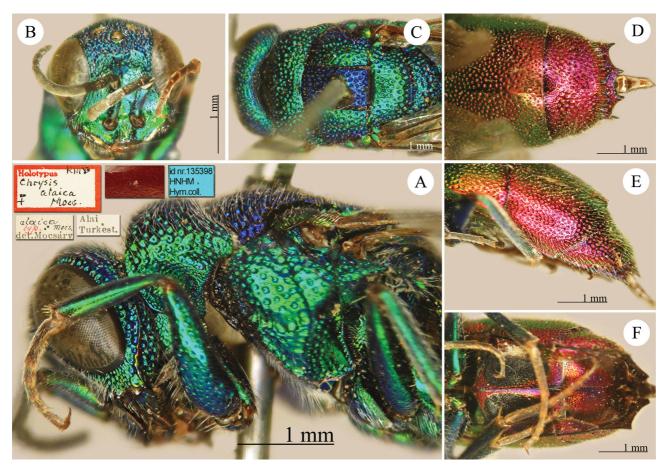


PLATE 2. *Chrysis alaica* Mocsáry, 1912, holotype ♀. **A**. Head and mesosoma, lateral view; **B**. Head, frontal view; **C**. Head and mesosoma, dorsal view; **D**. T1 and T2, dorsal view; **E**. Metasoma, lateral view; **F**. Metasoma, ventral view.

Chrysis analis altaica Mocsáry, 1912 (Plate 4A–4F)

Chrysis (Tetrachrysis) analis var. altaica Mocsáry 1912b: 586.

Type locality. Kazakhstan: "Altai: Semipalatinsk (Mus. Hung.)".

Holotype, \subsetneq : Altai Semipalatinsk // v. *altaica* Mocs. typ. det. Mocsáry // Holotypus *Chrysis analis altaica* \subsetneq Mocs. RMB // id nr. 135384 HNHM Hym. coll..

Remarks. Chrysis analis var. altaica Mocsáry, 1912 was traditionally considered as a variation of Ch. analis Spinola, 1808 in the comparata species-group. This taxon is close to Ch. analis Spinolia, but very likely a separated species. Ch. analis is currently apparently distributed only in the western Palaearctic countries around the Mediterranean basin and from Central Europe to Caucasus.

Current status. Chrysis analis altaica Mocsáry, 1912.

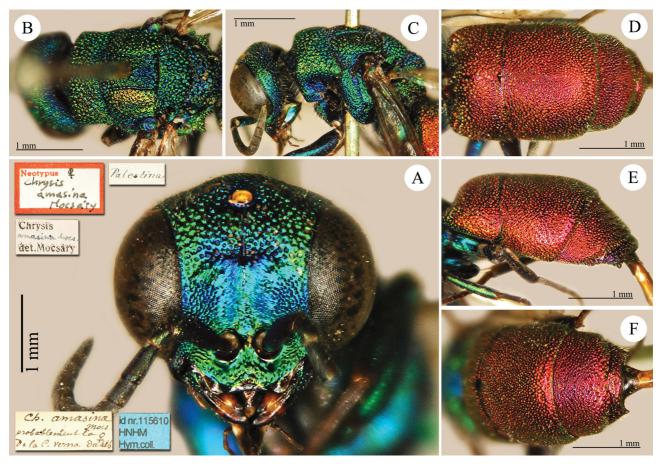


PLATE 3. *Chrysis amasina* Mocsáry, 1889, neotype ♀. **A**. Head, frontal view; **B**. Mesosoma, dorsal view; **C**. Head and mesosoma, lateral view; **D**. Metasoma, dorsal view; **E**. Metasoma, lateral view; **F**. Metasoma, posterior view.

Chrysis analis caucasica Mocsáry, 1912 (Plate 5A–5F)

Chrysis (Tetrachrysis) analis var. caucasica Mocsáry 1912b: 586, nom. praeocc. nec Radoszkowski 1877.

Chrysis (Tetrachrysis) analis f. caucasicola Balthasar, 1953: 228. Replacement name for Chrysis analis var. caucasica Mocsáry, 1912, nom. praeocc., nec Mocsáry, 1889.

Chrysis (Chrysis) analis ssp. caucasiensis Linsenmaier 1959a: 146. Unnec. replacement name for C. analis var. caucasica Mocsáry 1912b nec Radoszkowski, 1877.

Type locality. Azerbaijan: "Caucasus: Adji-Kent [= Adjikent] (Mus. Hung.)".

Holotype, ♀: Caucasus Adji-Kent // 5.VI.1907 // v. *caucasica* Mocs. typ. det. Mocsáry // *Chrysis caucasiensis* Lins. nom. nov. Linsenmaier det. 59 // Holotypus *Chrysis analis caucasica* ♀ Mocs. RMB // id nr. 135383 HNHM Hym. coll..

Remarks. The holotype is a female and not a male, as stated by Kimsey & Bohart (1991). Balthasar (1953) replaced *caucasica* Mocsáry, 1912 *nec* Radoszkowski, 1877 with *Ch. analis* f. *caucasicola*, not listed in Linsenmaier (1959a, 1959b, 1968, 1987) and Kimsey & Bohart (1991). Linsenmaier (1959a) again replaced the name *caucasica* Mocsáry, 1912 with *Ch. analis caucasiensis*. Later Linsenmaier (1968) raised *Ch. caucasiensis* to species rank, and finally (Linsenmaier 1987) synonymised *Ch. caucasiensis* with *Ch. perrini* Radoszkowski, 1889. Nevertheless, this synonym is in error because *Ch. causicola*, is clearly distinct from *Ch. perrini* by shape of T3, colour of sternites and shape of black spots on S2 (Rosa et al. 2015e: plate 4). In Kimsey & Bohart (1991) all these names are synonymised with *Ch. analis* Spinola, 1808. *Ch. caucasicola* Balthasar, 1953 is similar to *Ch. simplonica* Linsenmaier by having red metallic colouration of sternites and the shape of S2.

Current status. Chrysis caucasicola Balthasar, 1953.

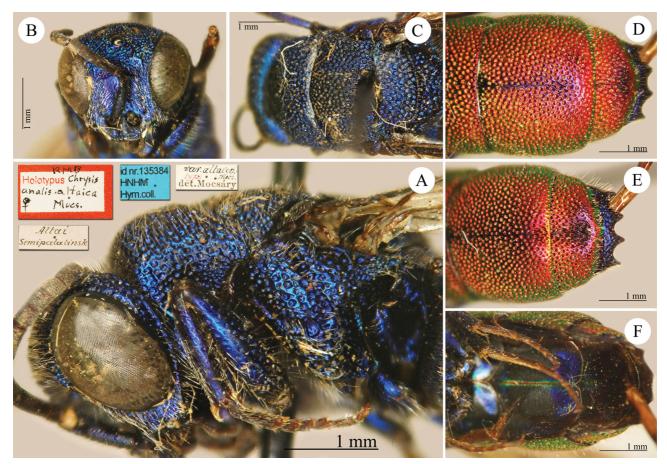


PLATE 4. *Chrysis analis altaica* Mocsáry, 1912, holotype ♀. **A**. Head and mesosoma, lateral view; **B**. Head, frontal view; **C**. Mesosoma, dorsal view; **D**. Metasoma, dorsal view; **E**. T2 and T3, posterior view; **F**. Metasoma, ventral view.

Chrysis arabica Mocsáry, 1911

(Plate 6A-6F)

Chrysis (Olochrysis) arabica Mocsáry 1911b: 470.

Type locality. Yemen: "Arabia, mense Februario (Mus. Hung.)".

Holotype, \circlearrowleft : Lahej. Arabia 4.2.95 Jerbury // Collect. Bingham // *arabica* Mocs. typ. det. Mocsáry // [label with genitalia] *arabica* Mocs. // Holotypus \circlearrowleft *Chrysis arabica* Mocs. // id nr. 135246 HNHM Hym. coll..

Remarks. Kimsey & Bohart (1991: 385) included *Chrysis arabica* Mocsáry, 1911 in the *capitalis* speciesgroup. However, *Ch. arabica* does not perfectly match the diagnosis of this species-group and Linsenmaier (1994a) established the *arabica* species-group, including this single species.

Current status. Chrysis arabica Mocsáry, 1911.

Chrysis ariadne Mocsáry, 1889

Chrysis (Tetrachrysis) ariadne Mocsáry 1889: 416.

Type locality. Daghestan, Greece, Transcaspia: "Graecia (Morea, Mus. Caes. Vindob. et Mus. Hung.); Caucasus (Daghestan, Coll. Rad.); territorium Transcaspicum (Coll. Rad.!)".

Lectotype, ♂: Caucasus Daghestan // Lectotypus ♂ *Chrysis ariadne* Mocsáry // id nr. 135093 HNHM Hym. coll..

Remarks. Móczár (1965) designated the lectotype. In Radoszkowski's collection at ISEA-PAN there are two paralectotypes (Rosa *et al.* 2015e).

Current status. Chrysis soror (Dahlbom, 1854) (synonymised by Linsenmaier 1959a).

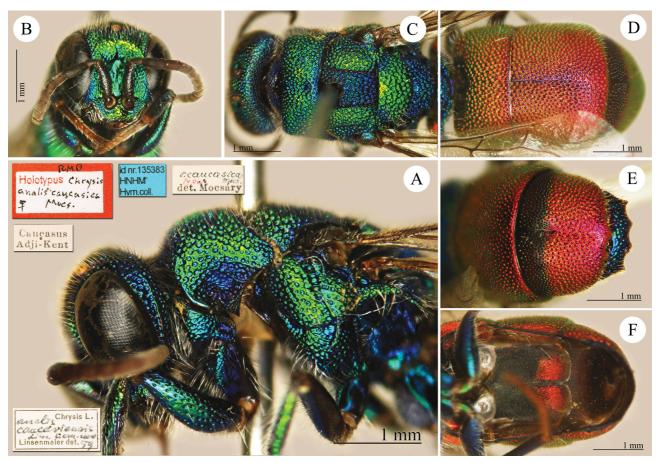


PLATE 5. *Chrysis analis caucasica* Mocsáry, 1912, holotype ♀. **A**. Head and mesosoma, lateral view; **B**. Head, frontal view; **C**. Mesosoma, dorsal view; **D**. Metasoma, dorsal view; **E**. T2 and T3, posterior view; **F**. Metasoma, ventral view.

Chrysis arrogans Mocsáry, 1889 (Plate 7A–7D)

Chrysis (Pentachrysis) arrogans Mocsáry 1889: 532.

Type locality. Turkey: "Asia minor (Malatia [= Malatya] in Mesopotamia, Mus. Hung.)".

Holotype, ♀: Malatia <handwritten by Móczár> // 746-45 // *arrogans* Mocs. typ. det. Mocsáry // red label // Holotypus ♀ *Chrysis arrogans* Mocs. RMB // id nr. 135177 HNHM Hym. coll..

Remarks. Linsenmaier (1968) considered *Chrysis arrogans* Mocsáry, 1889 as a valid species, but later (Linsenmaier 1987) considered *Ch. arrogans* as the oriental subspecies of *Chrysis goliath* Abeille de Perrin, 1878. Kimsey & Bohart (1991) placed *Ch. goliath* in synonym of *Ch. seminigra* (Walker) without type examination of both type series and considered *Ch. arrogans* as a valid species.

Current status. Pentachrysis arrogans (Mocsáry, 1889) (transferred by Kimsey & Bohart 1991).

Chrysis astuta Mocsáry, 1912

Chrysis (Tetrachrysis) astuta Mocsáry 1912b: 562.

Type locality. Japan: "Japonia: Tokio (Mus. Hung.)".

Holotype, \circlearrowleft : Japan Tokio 1897 Asaj. Oka // astuta Mocs. typ. det. Mocsáry // red label // Chrysis japonica Cam. Linsenmaier det. 62 // Holotypus \circlearrowleft Chrysis astuta Mocs. RMB // id nr. 135353 HNHM Hym. coll..

Current status. Chrysis japonica Cameron, 1887 (synonymised by Tsuneki 1953).

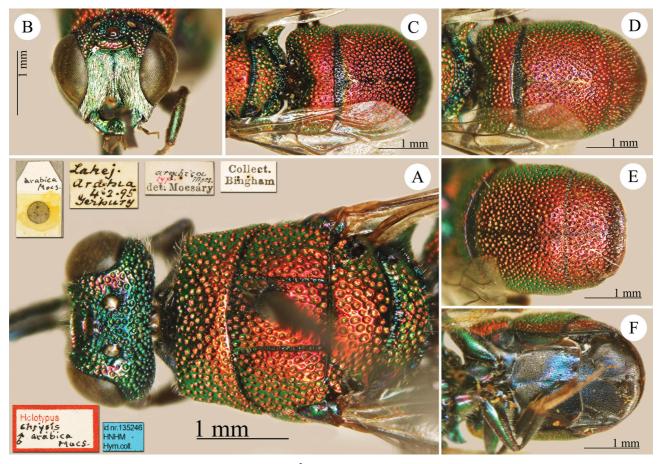


PLATE 6. *Chrysis arabica* Mocsáry, 1911, holotype 3. **A.** Head and mesosoma, dorsal view; **B.** Head, frontal view; **C.** Scutellum, metanotum, T1 and T2, dorsal view; **D.** Metasoma, dorsal view; **E.** Metasoma, posterior view; **F.** Metasoma, ventral view.

Chrysis aureola Förster, 1853

Chrysis aureola Förster 1853: 319.

Type locality. South Europe: "Von Herrn Meigen und zwar ohne Angabe des Fundortes mit vielen andern dem südlichen Europa angehörenden Hymenopteren erhalten".

Holotype (?), ♂ : 90-65 // Süd-Europa // *Gonochrysis elegans* Lep. det. M. Móczár // id nr. 115616 HNHM Hym. coll..

Remarks. In Kimsey & Bohart (1991) the type depository was doubtfully MNHU, and we were not able to find the type of *Ch. aureola*, either. Unfortunately there are no handwritten identification labels by Förster to indicate the type status.

Current status. Chrysis elegans Lepeletier, 1806 (synonymised by Mocsáry 1889).

Chrysis aurulenta Mocsáry, 1889

Chrysis (Tetrachrysis) aurulenta Mocsáry 1889: 472, nom. praeocc. nec Curtis 1824. Chrysis aurula Bohart in Kimsey & Bohart 1991: 387. Replacement name for C. aurulenta Mocsáry 1889 nec Curtis 1824. **Type locality**. Turkey: "Malatia [= Malatya] in Mesopotamia Asiae minoris (Mus. Hung.)".

Holotype, ♂: Asia minor // 801-10 // Malatia // *aurulenta* Mocs. typ. det. Mocsáry // red label // Holotypus *Chrysis aurulenta* ♂ Mocs. RMB // id nr. 135392 HNHM Hym. coll. // *Chrysis aurula* Bohart = *aurulenta* Moc. ♂ det. F. Strumia.

Remarks. The type is badly damaged and broken in several parts.

Current status. Chrysis aurula Bohart in Kimsey & Bohart, 1991.

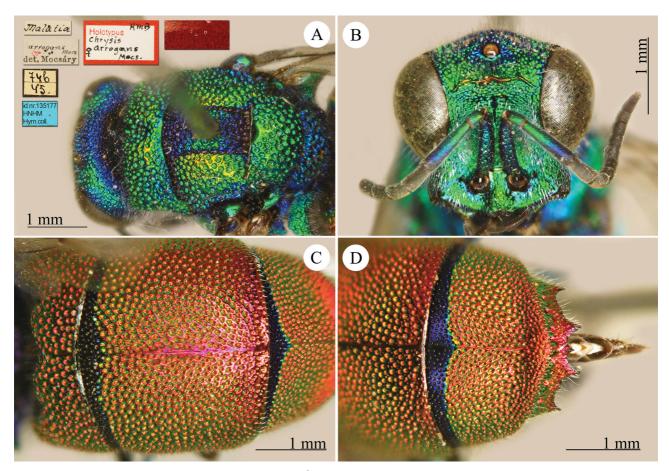


PLATE 7. *Chrysis arrogans* Mocsáry, 1889, holotype ♀. **A**. Head and mesosoma, dorsal view; **B**. Head, frontal view; **C**. Metasoma, dorsal view; **D**. T2 and T3, posterior view.

Chrysis bahadur Nurse, 1903

Chrysis bahadur Nurse 1903a: 11.

Type locality. India: "Kashmir; three specimens obtained at various elevations between 5000 and 9000 ft.".

Paralectotype, 1♀: Kashmir 6-8000 ft 6.01 // Collect. Bingham // bahadur Nurse Bingham typ. // Chrysis bahadur Nurse det. Mocsáry // id nr. 135339 HNHM Hym. coll..

Remarks. Bohart (in Kimsey & Bohart 1991) designated the lectotype deposited at BMNH.

Current status. Chrysis bahadur Nurse, 1903.

Chrysis calimorpha Mocsáry, 1882

Chrysis dives Dahlbom 1854: 301, nom. praeocc. nec Lucas 1849.

Chrysis (Hexachrysis) calimorpha Mocsáry 1882: 71 [Hungarian], 90 [Latin]. Replacement name for C. dives Dahlbom 1854 nec Lucas 1849.

Type locality. Italy: "Habitat in Sicilia, D. Grohmann; Mus. D. Spinola.".

Neotype, \circlearrowleft : R. Palosa 23.6.879 // \circlearrowleft // Lectotypus \circlearrowleft *Chrysis calimorpha* Mocsáry // Neotype *Chrysis calimorpha* Mocsáry des. P. Rosa 2014 // id nr. 135154 HNHM Hym. coll..

Remarks. Dahlbom (1854: 300) described *Chrysis dives* based on a Sicilian specimen collected by Grohmann. Mocsáry (1882: 71, 90) observed that the name *Ch. dives* Dahlbom, 1854 is a junior homonym of *Ch. dives* Lucas, 1849. Therefore, he replaced the name *Ch. dives* Dahlbom with *Ch. calimorpha* Mocsáry. In the same article, Mocsáry (1882: 71) listed two specimens of *Ch. calimorpha* collected in central Hungary. Later, Móczár (1965: 179) designated these two specimens listed by Mocsáry (1882) as lectotype and paralectotype of *Ch. calimorpha*, but the holotype of this species is the Sicilian specimen housed in the Spinola collection, therefore the lectotype designation is invalid (ICZN 1999: Article 74.2). Since the holotype of *Ch. dives* Dahlbom is almost destroyed, the mesosoma clearly belongs to a different species and because the history of the name *Ch. calimorpha* is rather complex, Rosa & Xu (2015) suggested the suppression of the type of *Ch. dives* and designated as the neotype of *Ch. dives* the female of *Ch. calimorpha* Mocsáry, selected by Móczár as lectotype and bearing the following labels to maintain the stability of the system. Pictures of the neotype are in Rosa & Xu (2015).

Current status. Chrysis calimorpha Mocsáry, 1882.

Chrysis carinaeventris Mocsáry, 1882

Chrysis (Olochrysis) carinaeventris Mocsáry, 1882: 50 [Hungarian], 84 [Latin].

Type locality. Hungary: "In Hungaria centrali in unico specimine inventa est".

Holotype, ♀: Peczel Kuthy // 681-8 // carinaeventris Mocs. typ. det. Mocsáry // Holotypus Chrysis carinaeventris ♀ Mocsáry // Chrysis angustifrons Ab. det. Mocsáry // Chr. angustifrons Ab.P. det. Móczár // id nr. 135082 HNHM Hym. coll..

Current status. Chrysis angustifrons Abeille de Perrin, 1878 (synonymised by Mocsáry 1889).

Chrysis carnifex Mocsáry, 1889

Chrysis (Tetrachrysis) carnifex Mocsáry 1889: 517.

Type locality. China: "China borealis (Ta-tschian-sy, Mus. Hung.)".

Holotype, ♂: 801-32 // Ta-tschian-sy <handwritten by Móczár> // *carnifex* Mocs. typ. det. Mocsáry // red label // Holotypus *Chrysis carnifex* Mocs. ♂ RMB // id nr. 135405 HNHM Hym. coll..

Remarks. Pictures of the type are in Rosa *et al.* (2014: 96, plate 31). *Chrysis carnifex* Mocsáry, 1889 belongs to the *ignita* species-group.

Current status. Chrysis carnifex Mocsáry, 1889.

Chrysis chalcea Móczár, 1965

(Plate 8A-8F)

Chrysis chalcea Móczár 1965: 176.

Type locality. Bosnia and Herzegovina, Romania: "Zenica (Jugoslawien) \subsetneq , leg. I. Nagy 1.VII.1911; Allotypus: Német Bogsán (Boc°a Montan, Rumänien) \circlearrowleft ; Paratypus: Német Bogsán 24.IV.1910 \supsetneq in Coll. Mus. Nat. Hung. Alle Exemplare wurden von Herrn Dr. St. Zimmermann besichtigt.

Holotype, ♀: Zenica Nagy Ignácz // nov. sp. 1 det. L. Móczár // Holotypus ♀ *Chrysis (Tetra-) chalcea* Móczár 1963 // n. sp.1 und 2 sind identisch! <handwritten by Zimmermann> // id nr. 135155 HNHM Hym. coll..

Allotype, ♂: Német Bogsan Hungaria // Allotype ♂ *Chrysis (Tetra-) chalcea* Móczár 1963 // *nec iphimedeia* <handwritten by Zimmermann> // id nr. 135156 HNHM Hym. coll..

Paratype, 1♀: Német Bogsan Hungaria // 910 IV.24 // Paratype ♂ *Chrysis chalcea* sp.n. Móczár 1965 / teste Papp J. 1986 // id nr. 135158 HNHM Hym. coll..

Remarks. The genital capsula of the allotype is prepared on a separated transparent label (id nr. 135157 HNHM Hym. coll.). *Chrysis chalcea* Móczár, 1965 belongs to the *ignita* species-group and is similar to *Ch. obtusidens* Dufour & Perris, 1840.

Current status. Chrysis chalcea Móczár, 1965.

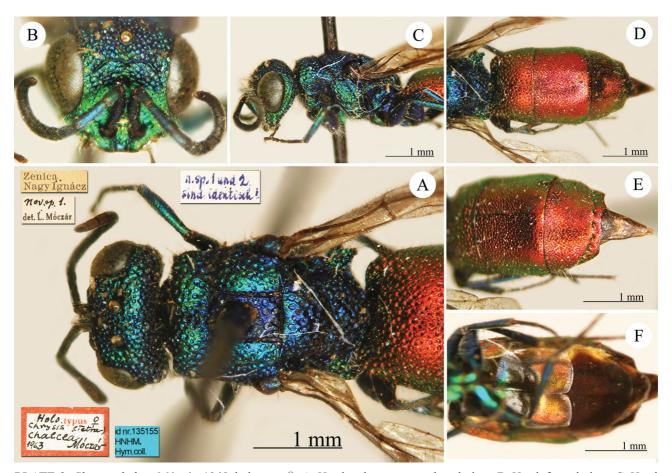


PLATE 8. *Chrysis chalcea* Móczár, 1965, holotype, ♀. **A**. Head and mesosoma, dorsal view; **B**. Head, frontal view; **C**. Head and mesosoma, lateral view; **D**. Metasoma, dorsal view; **E**. T2 and T3, postero-lateral view; **F**. Metasoma, ventral view.

Chrysis chevrieri orientalis Mocsáry, 1889

Chrysis (Tetrachrysis) chevrieri var. orientalis Mocsáry 1889: 480, nom. praeocc. nec Guérin-Méneville, 1842. Chrysis (Chrysis) comparata orientica Linsenmaier 1959a: 149, replacement name for Chrysis (Tetrachrysis) chevrieri var. orientalis Mocsáry 1889 nec Guérin-Méneville, 1842.

Type locality. Caucasus and Greece: "Graecia (Parnassus, Coll. Schmiedeknechti!; Ephesus (Mus. Turicense!) et Caucasus (Coll. Rad.!, Mus. Hung. et Vindob.! et Coll. Fairmairei!)".

Lectotype, \circlearrowleft : Caucasus // Lectotypus \circlearrowleft *Chrysis chevrieri* var. *orientalis* Mocs. // Lectotypus \circlearrowleft *Chr. in. caucasica* Mocsáry // id nr. 135105 HNHM Hym. coll..

Paralectotype, 1♂: Caucasus // Paralectotypus ♂ *Chrysis chevrieri* var. *orientalis* Mocs. // Paralectotypus ♂ *Chr. in. caucasica* Mocsáry // id nr. 135105 HNHM Hym. coll..

Remarks. Móczár (1965: 174) designated the lectotype. Another paralectotype is deposited at ISEA-PAN. Linsenmaier (1959a) replaced the name *Ch. comparata* var. *orientalis* Mocsáry, 1879b *nec* Guérin-Méneville, 1842 with *Ch. comparata orientica* and considered it as the subspecies of *Ch. comparata* Lepeletier, 1806 distributed in eastern Mediterranean countries and the Middle East.

Current status. Chrysis comparata Lepeletier, 1806 (synonymised by Móczár 1965: 175).

Chrysis chrysochlora Mocsáry, 1889

Chrysis (Tetrachrysis) chrysochlora Mocsáry 1889: 515.

Type locality. Uzbekistan: "Patria: Turkestania (Taschkend, Coll. Rad.! et Mus. Hung.)".

Lectotype, ♀: Tachkend (!) // *chrysochlora* n. sp. <handwritten by Mocsáry> // *chrysochlora* typ. det. Mocsáry // Holotypus *Chrysis chrysochlora* ♀ Mocs. RMB // id nr. 135133 HNHM Hym. coll. // Lectotypus *Chrysis chrysochlora* ♀ Mocsáry des. Bohart 1991.

Remarks. Bohart (in Kimsey & Bohart 1991: 396) designated the lectotype. Six paralectotypes are deposited at Radoszkowski's collection at ISEA-PAN and pictures of a paralectotype are in Rosa *et al.* (2014: 19, plate 12).

Current status. Chrysis keriensis Radoszkowski, 1887 (synonymised by Rosa et al. 2015e).

Chrysis chrysostigma Mocsáry, **1889** (Plate 9A–9F)

Chrysis (Tetrachrysis) chrysostigma Mocsáry 1889: 450.

Type locality. Greece, Hungary, Italy and Switzerland: "Italia (Lombardia, Dhlb).; Suse (in Pedemontano, Gir.); Helvetia (Tourn.): Hungaria meridionalis et septentrionalis in planitie, mense Julio valde rara (Mocs.); Graecia (Mus. Atheniense!)]".

Lectotype, &: Diakovár // Chrysis ramburi v. chrisostigma (!) Mocs. det. Móczár 962 // Lectotypus & Chr. chrysostigma Mocsáry // id nr. 135096 HNHM Hym. coll..

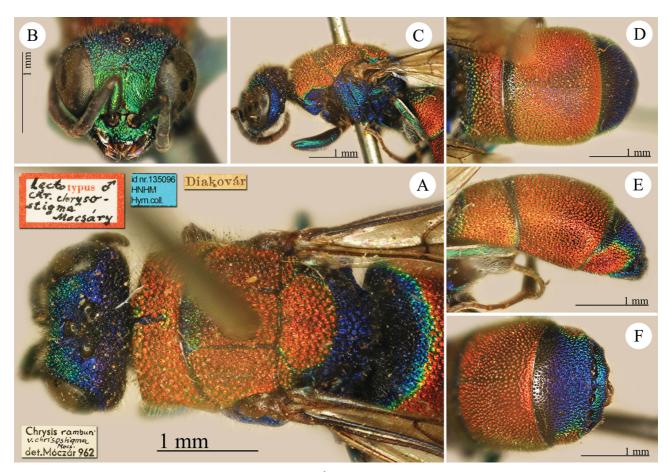


PLATE 9. *Chrysis chrysostigma* Mocsáry, 1889, lectotype ♂. **A**. Head and mesosoma, dorsal view; **B**. Head, frontal view; **C**. Head and mesosoma, lateral view; **D**. Metasoma, dorsal view; **E**. Metasoma, lateral view; **F**. T2 and T3, posterior view.

Paralectotypes, 1♀: Jaszenova // 568-18 // 1880 leg. Mocsáry // Chrysis ramburi v. chrisostigma (!) Mocs. det. Móczár 962 // Paralectotypus ♀ Chr. chrysostigma Mocsáry // id nr. 135095 HNHM Hym. coll.; 1♂: S.a. Ujhely 13-6-86 // Chrysis ramburi v. chrisostigma (!) Mocs. det. Móczár 962 // Paralectotypus ♂ Chr. chrysostigma Mocsáry // id nr. 135097 HNHM Hym. coll..

Remarks. Dahlbom (1854) described *Chrysis ramburi* based one male from Spain and one female from Lombardy (Italy). The latter belongs to a different species described by Mocsáry (1889) as *Ch. chrysostigma* Mocsáry. *Chrysis ramburi* Dahlbom, 1854 is distributed in the Iberian Peninsula, southern France and northern Africa, whereas *Ch. chrysostigma* is widely distributed in Southern Europe from France to Czech Republic, and it is quite common in Italy. Móczár (1965: 172) considered *Ch. chrysostigma* a variation of *Ch. ramburi* and designated the lectotype of *Ch. chrysostigma* at HNHM. Kimsey & Bohart (1991: 455) placed *Ch. chrysostigma* in synonymy of *Ch. ramburi*. Rosa & Xu (2015) designated the lectotype of *Ch. ramburi* Dahlbom to fix the current interpretation of the two species.

Current status. Chrysis chrysostigma Mocsáry, 1889.

Chrysis ciliciensis Mocsáry, 1914

(Plate 10A-10D)

Chrysis (Holochrysis) ciliciensis Mocsáry 1914: 19.

Type locality. Turkey: "Asia minor: Tarsos in Cilicia (Mus. Hung.)".

Holotype, ♀: Asia min. Tarsos / *ciliciensis* Mocs. typ. det. Mocsáry / red label / Holotypus *Chrysis ciliciensis* Mocs. RMB / id nr. 135644 HNHM Hym. coll..

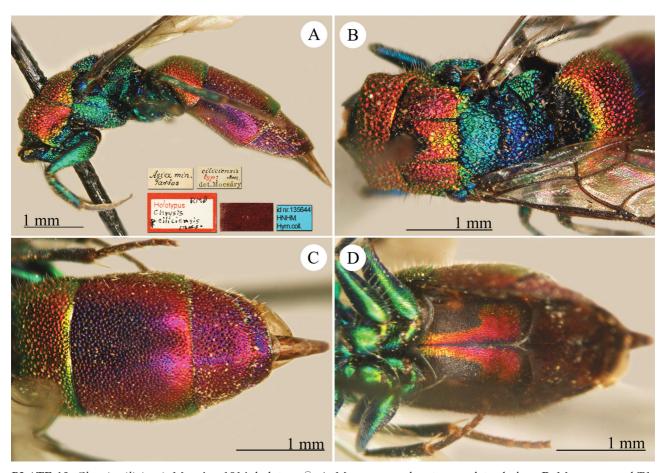


PLATE 10. *Chrysis ciliciensis* Mocsáry, 1914, holotype ♀. **A**. Mesosoma and metasoma, lateral view; **B**. Mesosoma and T1, dorsal view; **C**. Metasoma, dorsal view; **D**. Metasoma, ventral view.

Remarks. The type is badly damaged, it lacks the head. *Chrysis ciliciensis* Mocsáry, 1914 belongs to the *dichroa* species-group. Arens (2001) revised this species-group.

Current status. Chrysura ciliciencis (Mocsáry, 1914) (transferred by Kimsey & Bohart 1991).

Chrysis cingulicornis Förster, 1853

Chrysis cingulicornis Förster 1853: 313.

Type locality. Hungary: "Aus Ungarn. Eine Entdeckung des Herrn Dr. von Frivaldszky".

Holotype (?), δ : Frst / 14-768 / Chrysis viridula L. (= bidentata L.) var. / Chrysis viridula L. v. cingulicornis F. det. Móczár M. / Chr. vir. cyl. v. cingulicornis (!) Frst. det. Móczár 962 / id nr. 115605 HNHM Hym. coll..

Remarks. Specimen damaged, it lacks the right forewing, part of the left flagellum and both metalegs. As in the case of *Chrysis aureola* Förster, 1853 (see above) this specimen bears the typical Förster's labels, but it is missing of the identification labels, therefore we cannot state the type status for sure.

Current status. Chrysis cingulicornis Förster, 1853.

Chrysis consobrina Mocsáry, 1889

Chrysis (Tetrachrysis) consobrina Mocsáry 1889: 458.

Type locality. Iran, Transcaspia and Turkmenistan: "*Territorium Transcaspicum (Coll. Rad. !) et Persia (Demalen* [= Demabend] *et Ashabad. Coll. Rad. et Mus. Hung.*)".

Lectotype, ♀: Ashabad // Trans-caspia // *consobrina* Mocs. typ. det. Mocsáry // Lectotypus *Chrysis consobrina* ♀ Mocs. RMB // id nr. 135094 HNHM Hym. coll..

Remarks. Bohart (in Bohart & French 1986) designated the lectotype. Three paralectotypes are deposited at Radoszkowski's collection in ISEA-PAN (Rosa *et al.* 2015e). *Chrysis consobrina* was considered a subspecies of *Ch. scutellaris* Fabricius, 1794 by Semenov-Tian-Shanskij & Nikolskaja (1954) and later a subspecies of *Ch. soror* Dahlbom, 1854 (Linsenmaier 1959a). Kimsey & Bohart (1991) placed *Ch. consobrina* in synonym of *Ch. soror*. However, *Ch. consobrina* is a valid species and only partially shares the colour with the females of *Ch. scutellaris* and *Ch. soror*. Pictures of the type are in Rosa *et al.* (2014: 98, plate 36).

Current status. Chrysis consobrina Mocsáry, 1889.

Chrysis consobrina nova Radoszkowski, 1891

Chrysis consobrina var. nova Radoszkowski 1891: 185.

Type locality. Turkmenistan: "Ashabad".

Syntype, 1♀: Trans-Caspia // *consobrina* var. *nova* <handwritten by Radoszkowski> // *Chrysis scutellaris* v. *nova* Rad. det. Mocsáry / id nr. 115649 HNHM Hym. coll..

Remarks. Most of the species described by Radoszkowski in 1891 (e.g. *Ch. simulatrix*, *Ch. unica*), bear the generic locality label "Trans-Caspia" and not "Ashabad" (Rosa *et al.* 2015e). It belongs to the *scutellaris* speciesgroup and it is similar to *Ch. soror* Dahlbom, 1854.

Current status. Chrysis maracandensis Radoszkowski, 1877 (synonymised by Kimsey & Bohart 1991: 436).

Chrysis cretica Mocsáry, 1911

(Plate 11A-11D)

Chrysis (Holochrysis) Cretica Mocsáry 1911a: 316.

Type locality. Greece, Crete: "Canea, mense Julio; specimen unicum".

Holotype, ♀: Creta Bir // Canea 1906.VII. // red label // *cretica* Mocs. typ. det. Mocsáry // Holotypus *Chrysis cretica* ♀ Mocs. RMB // *Chrysura cretica* ♀ (Mocsary 1911) det. F. Strumia // id nr. 135646 HNHM Hym. coll..

Remarks. Kimsey & Bohart (1991: 494) synonymised *Chrysis cretica* under *Chrysura purpureifrons* (Abeille de Perrin, 1878). Later Strumia (2007: 104) revalidated *Ch. cretica*.

Current status. Chrysura cretica (Mocsáry, 1911) (transferred by Kimsey & Bohart 1991).

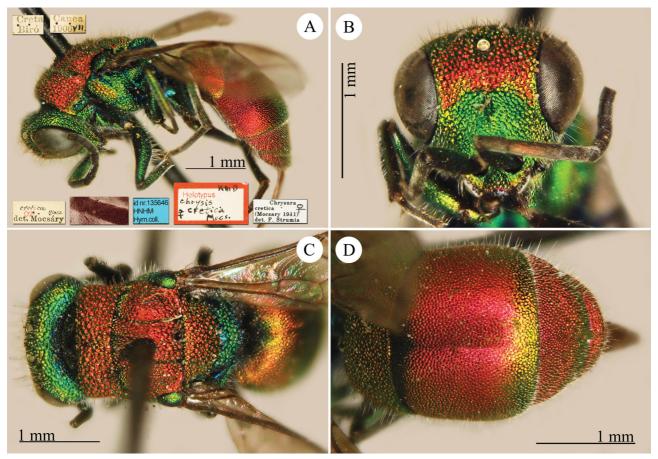


PLATE 11. *Chrysis cretica* Mocsáry, 1911, holotype ♀. **A.** Habitus, lateral view; **B.** Head, frontal view; **C.** Head and mesosoma, dorsal view; **D.** Metasoma, dorsal view.

Chrysis csikiana Mocsáry, 1912

(Plate 12A-12F)

Chrysis (Tetrachrysis) Csikiana Mocsáry 1912a: 406.

Type locality. Kazakhstan: "Sibiria occidentalis: Semipalatinsk (Mus. Hung.)".

Lectotype, \circlearrowleft : Altai Semipalatinsk // *Csikiana* Mocs. typ. det. Mocsáry // red label // Lectotypus *Chrysis csikiana* Mocs. RM Bohart // id nr. 135214 HNHM Hym. coll..

Paralectotypes, 3♂♂: Altai Semipalatinsk // *Csikiana* Mocs. typ. det. Mocsáry // red label // id nr. 135215, 135217, 135218 HNHM Hym. coll.; 1♂ and 1♀: Altai Semipalatinsk // *Csikiana* Mocs. typ. det. Mocsáry // red label // *Chrysis* L. *fouqueti* Buyss. *csikiana* Linsenmaier det. 59 // id nr. 135216, 135219 HNHM Hym. coll..

Remarks Bohart (in Bohart & French 1986) designated the lectotype. Kimsey & Bohart (1991: 412) placed *Chrysis csikiana* Mocsáry, 1912 and *Ch. nitidularia* Mocsáry, 1912 in synonymy with *Ch. fouqueti* du Buysson, 1908. Nevertheless, *Ch. csikiana* and *Ch. nitidularia* apparently are not conspecific. Males can be separated by different shape of apical margin of T3, in lateral view *Ch. csikiana* has a swelling before the lateral tooth, missing in *Ch. nitidularia*; different T3, with acute apical teeth (blunt in *Ch. nitidularia*), and narrow and deep intervals

(narrower the median interval, larger the laterals in *Ch. nitidularia*); different metasomal punctuation on T2 and shape of black spots on S2. *Ch. csikiana* has short oculo-ocellar distance, as in the case of *Ch. fouqueti*.

Current status. Chrysis fouqueti du Buysson, 1908 (synonymised by Kimsey & Bohart 1991).

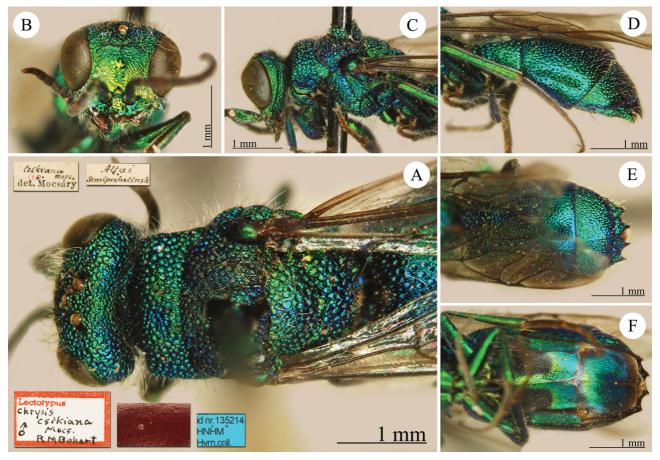


PLATE 12. *Chrysis csikiana* Mocsáry, 1912, lectotype 3. A. Head and mesosoma, dorsal view; **B**. Head, frontal view; **C**. Head and mesosoma, lateral view; **D**. Metasoma, lateral view; **E**. Metasoma, dorsal view; **F**. Metasoma, ventral view.

Chrysis cuproprasina Mocsáry, 1913

(Plate 13A-13F)

Chrysis (Hexachrysis) cuproprasina Mocsáry 1913a: 8.

Type locality. Turkey: "Burnabat [= Bornova], mense Julio (Mus. Hung.)".

Holotype, ♀: Burnabat Smyrna // 1902.VII // *Chrysis* n. sp. // *cuproprasina* Mocs. typ. det. Mocsáry // red label // Holotypus ♀ *Chrysis cuproprasina* Mocs. RMB // id nr. 135178 HNHM Hym. coll..

Remarks. Chrysis cuproprasina Mocsáry, 1913 belongs to the smaragdula species-group (Ch. sexdentata species-group sensu Linsenmaier 1959a).

Current status. Chrysis cuproprasina Mocsáry, 1913.

Chrysis cyaneata Mocsáry, 1909

(Plate 14A-14F)

Chrysis (Tetrachrysis) cyaneata Mocsáry 1909: 4.

Type locality. Kazakhstan: "Perovsk [= Kyzylorda] 27.V.1907. Specimen unicum".

Holotype, \circlearrowleft : Perovosk 29.V.1907 Wollmann // *cyaneata* Mocs. typ. det. Mocsáry // red label // Holotypus *Chrysis cyaneata* \circlearrowleft Mocs. RMB // id nr. 135382 HNHM Hym. coll..

Remarks. Chrysis cyaneata Mocsáry, 1909 belongs to the maculicornis species-group, sensu Kimsey & Bohart (1991) by having short malar space.

Current status. Chrysis cyaneata Mocsáry, 1909.

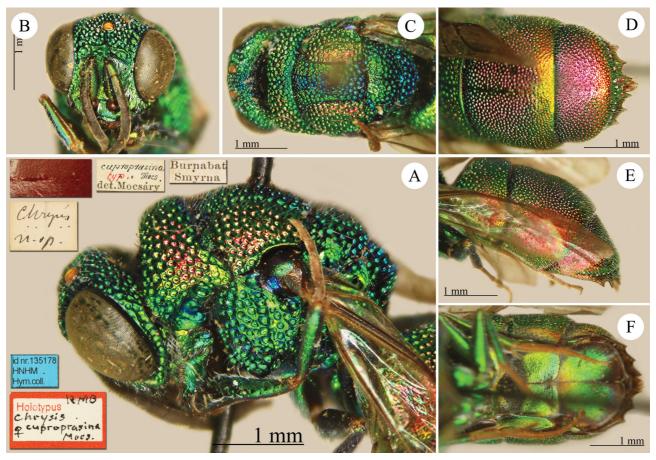


PLATE 13. *Chrysis cuproprasina* Mocsáry, 1913, holotype ♀. **A**. Head and mesosoma, lateral view; **B**. Head, frontal view; **C**. Head and mesosoma, dorsal view; **D**. T2 and T3, dorsal view; **E**. Metasoma, lateral view; **F**. Metasoma, ventral view.

Chrysis cyanocoelia Mocsáry, 1889

Chrysis (Olochrysis) cyanocoelia Mocsáry 1889: 249.

Type locality. Georgia: "Caucasus (Tiflis [= Tbilisi], Mus. Hung.)".

Holotype, ♂: Caucasus Tiflis Leder (Reitter.) // 676-25 // (*cyanocoelia* Mocs.) <handwritten by Mocsáry> // *Chrysis desertorum* Buyss. det. Mocsáry // Holotypus *Chrysis cyanocoelia* ♂ Mocs. RMB // id nr. 135641 HNHM Hym. coll..

Remarks. Holotype male, not female. Bischoff (1913), Linsenmaier (1959a) and Kimsey & Bohart (1991) placed *Chrysis cyanocoelia* in synonym of *Ch. desertorum*, however the specimen labelled as holotype clearly belongs to the *Ch. varicornis* Spinola, 1838, therefore we propose the new synonymy *Chrysis varicornis* Spinola, 1838 = *Chrysis cyanocoelia* Mocsáry, 1889, **syn. nov.**.

Current status. Chrysura varicornis (Spinola, 1838) (transferred by Kimsey & Bohart 1991).

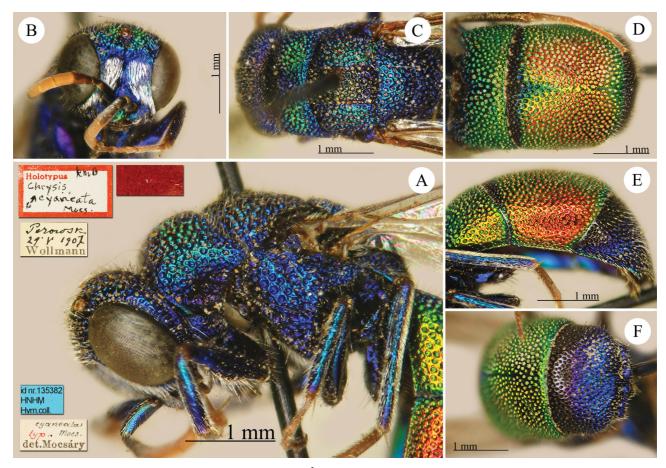


PLATE 14. *Chrysis cyaneata* Mocsáry, 1909, holotype ♂. **A.** Head and mesosoma, lateral view; **B.** Head, frontal view; **C.** Head and mesosoma, dorsal view; **D.** Metasoma, dorsal view; **E.** Metasoma, lateral view; **F.** T2 and T3, posterior view.

Chrysis cypria Mocsáry, 1902

(Plate 15A-15F)

Chrysis (Trichrysis) cypria Mocsáry 1902a: 341, nom. praeocc. nec du Buysson,1898b. Chrysis (Trichrysis) devia Linsenmaier 1959a: 170. Replacement name for C. cypria Mocsáry 1902 nec du Buysson 1898b.

Type locality. Cyprus: "Insula Cyprus (Larnaca) (Mus. Hung.)".

Holotype, ♀: Cyprus Larnaka Glaszner // VI.1900 // *cypria* Mocs. typ. det. Mocsáry // red label // red label // Holotypus *Chrysis cypria* Mocs. ♀ RM Bohart // = *devia* Lins. // *Trichrysis lacerta* Semen. det. F. Strumia ♀ // id nr. 135559 HNHM Hym. coll..

Remarks. The name *Chrysis cypria* Mocsáry is preoccupied by *Ch. bidentata* var. *cypria* du Buysson, 1898. Linsenmaier (1959a) replaced the name *Ch. cypria* Mocsáry with *Ch. devia* Linsenmaier, 1959, but later (Linsenmaier 1968) discovered that *Ch. lacerta* Semenov, 1954 is the oldest synonymic name, and proposed the latter as the valid name for this species. In Kimsey & Bohart (1991) *Ch. lacerta* is erroneously given as replacement name. *Trichrysis lacerta* and *T. scioensis* (Gribodo) have been inverted in Strumia's revision (2009) of Mediterranean species.

Current status. *Trichrysis lacerta* (Semenov, 1954) (synonymised by Lisnenmaier 1968, and transferred by Kimsey & Bohart 1991).

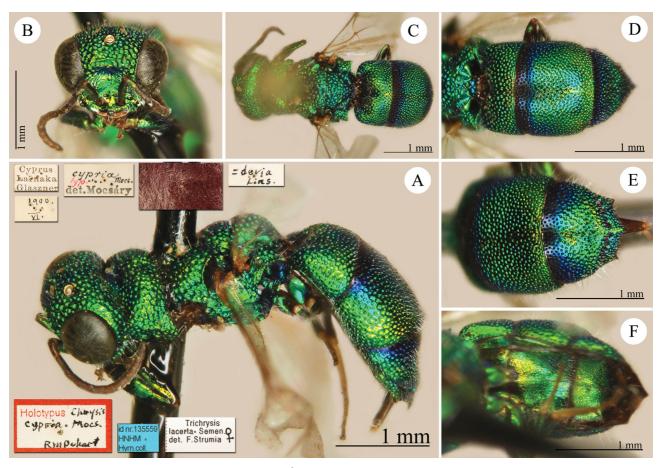


PLATE 15. *Chrysis cypria* Mocsáry, 1902, holotype ♀. **A**. Habitus, lateral view; **B**. Head, frontal view; **C**. Habitus, dorsal view; **D**. Metasoma, dorsal view; **E**. T2 and T3, posterior view; **F**. Metasoma, ventral view.

Chrysis dallatorreana Mocsáry, 1896 (Plate 16A–16F)

Chrysis (Spinolia) dallatorreana Mocsáry 1896: 2.

Type locality. Greece and Hungary: "Hungaria centralis (Isaszegh, mense Julio a Collega Dom. Kuthy detecta) et meridionalis (Szeged, Deliblat, a Dom. Vellay et Biró collecta), et etiam Graecia (Insula Poros, in nostra collectione). Duos mares et tres feminas habemus.

Lectotype, ♀: Isaszegh 13.7.93 // Lectotypus ♀ *Chrys.* (*Spin.*) *Dallatorreana* Mocsáry // 4.XI.1988 Berra vidit // id nr. 135069 HNHM Hym. coll..

Paralectotypes, 1♂: Isaszegh 18.7.93 // Paralectotypus ♂ *Chrys.* (*Spin.*) *Dallatorreana* Mocsáry // id nr. 135070 HNHM Hym. coll.; 1♂: Deliblat 5.VII // Paralectotypus ♂ *Chrys.* (*Spin.*) *Dallatorreana* Mocsáry // id nr. 135071 HNHM Hym. coll.; 1♀: Poros Krüper 90 // Paralectotypus ♀ *Chrys.* (*Spin.*) *Dallatorreana* Mocsáry // id nr. 135072 HNHM Hym. coll..

Possible paralectotype, 1♀: Deliblat 5.VII // Typus *Dallatorreana* Mocs. // *Spin. dallatorreana* Mocs. det. Móczár. (the word "typus" is strikethrough in the label).

Remarks. Móczár (1964b) designated the lectotype. Later Kimsey (1986) designated another specimen at MNHN as the lectotype, and then (Kimsey & Bohart 1991) synonymised *Spinolia dallatorreana* (Mocsáry, 1896) with *Spinolia insignis* (Lucas, 1849). Nevertheless Móczár's lectotype designation is valid and therefore Kimsey's (1986) subsequent designation is invalid and is based on a specimen collected at Péczel, locality not listed in the original description. *S. dallatorreana dallatorreana* is a distinct species distributed in central and eastern Europe (with a subspecies in northwestern Africa, *S. dallatorreana bicarenata* Linsenmaier, 1959, and one subspecies in

Turkey, *S. dallatorreana taurosiaca* Linsenmaier, 1987), whereas *S. insignis* is distributed only in northwestern Africa (Morocco, Algeria and Tunisia). *S. dallatorreana* can be recognized by arched metascutellum, in dorsal view (triangularly shaped in *S. insignis*) and pronotum distinctly longer (4 MOD) (3 MOD in *S. insignis*); moreover the colouration is considerably distinct, being bicoloured in *S. dallatorreana* and entirely olive green with coppery reflections in *S. insignis*. Rosa *et al.* (2015e) examined the type of *Spinolia dallatorreana* and realized that it is junior synonym of *S. pulchra* (Radoszkovsky, 1880). However, *S. dallatorreana* is the species name in usage since Mocsáry's monograph (1889). Rosa *et al.* (2015e) also suggested the reversal of precedence to maintain nomenclatural stability.

Current status. Spinolia dallatorreana (Mocsáry, 1896) (transferred by Bischoff 1913).

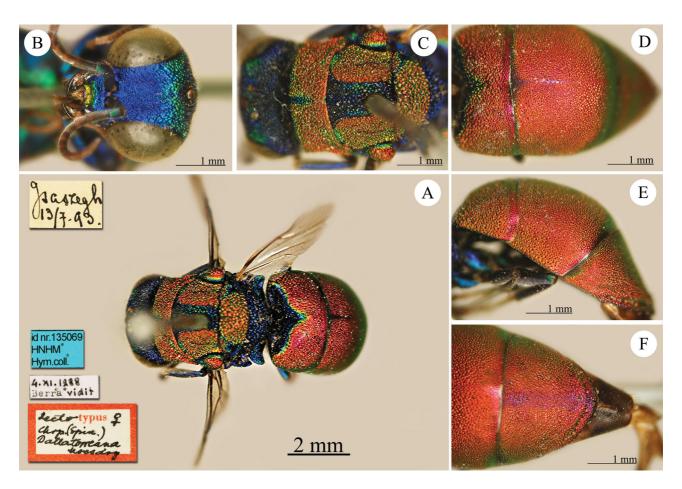


PLATE 16. *Chrysis dallatorreana* Mocsáry, 1896, lectotype ♀. **A.** Habitus, dorsal view; **B.** Head, frontal view; **C.** Head and mesosoma, dorsal view; **D.** Metasoma, dorsal view; **E.** Metasoma, lateral view; **F.** T2 and T3, dorso-lateral view.

Chrysis daurica Mocsáry, 1914

Chrysis (Holochrysis) daurica Mocsáry 1914: 16.

Type locality. Russia: "Transbaicalia: Ishita (Mus. Hung.)".

Holotype, ♂: Ischita Transbaical // *daurica* Mocs. typ. det. Mocsáry // red label // Holotypus *Chrysis daurica* Mocs. RMB // id nr. 135333 HNHM Hym. coll..

Remarks. Holotype male (not female).

Current status. Chrysis japonica Cameron, 1887 (synonymised by Kimsey & Bohart 1991).

Chrysis diacantha Mocsáry, 1889

(Plate 17A–17F)

Chrysis (Dichrysis) diacantha Mocsáry 1889: 318.

Type locality. Caucasus: "Caucasus (Coll. Rad.! et Mus. Hung.)".

Lectotype, ♀: Kaukasus Mlokosevic // Lectotypus ♀ *Chrysis diacantha* Mocsáry // Coll. Mus. Nat. Hung. // 135161 HNHM Hym. coll..

Remarks. Móczár (1965) designated the lectotype. The specimen described from the Radoszkowski collection was not found in ISEA-PAN (Rosa *et al.* 2015e).

Current status. Chrysis diacantha Mocsáry, 1889.

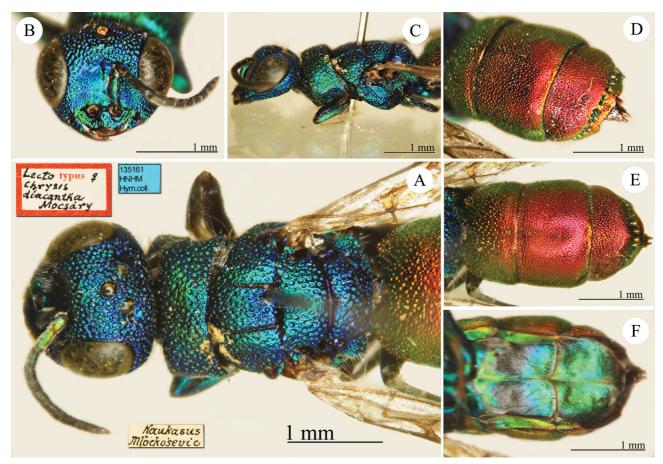


PLATE 17. *Chrysis diacantha* Mocsáry, 1889, lectotype, ♀. **A**. Head and mesosoma, dorsal view; **B**. Head, frontal view; **C**. Head and mesosoma, lateral view; **D**. Metasoma, dorso-lateral view; **E**. Metasoma, dorsal view; **F**. Metasoma, ventral view.

Chrysis dichroa minor Mocsáry, 1889

Chrysis (Olochrysis) dichroa var. minor Mocsáry 1889: 274.

Type locality. Hungary: "Hungaria centralis et meridionalis, cum typo simul obviens".

Lectotype, ♀: Gellérth. [= Gellérthegy] maj.15 // Lectotypus ♀ *Chr. dichroa* var. *minor* Mocsáry / Coll. Mus. Nat. Hung. // id nr. 135625 HNHM Hym. coll..

Paralectotypes, 3♂♂, 2♀♀: Budapest // Paralectotypus *Chr. dichroa* var. *minor* Mocsáry / id nr. 135624, 135629, 135631, 135632 HNHM Hym. coll.; 1♀: Péczel // Paralectotypus ♀ *Chr. dichroa* var. *minor* Mocsáry // id nr. 135626 HNHM Hym. coll.; 1♀: 604-106 // Domogled // Paralectotypus ♀ *Chr. dichroa* var. *minor* Mocsáry // id nr. 135628 HNHM Hym. coll.; 1♂: B.örs // 25.V.1886 // Paralectotypus ♂ *Chr. dichroa* var. *minor* Mocsáry // id nr. 135628 HNHM Hym. coll..

Remarks. Móczár (1965: 168) designated the lectotype. Bohart (in Kimsey & Bohart 1991: 488) designated another lectotype in HNHM, without pinning any label and the specimen could be the same selected by Móczár (1965); anyway, Móczár's lectotype designation is valid. *Chrysura dichroa minor* (Mocsáry, 1889) belongs to the *dichroa* species-group and very likely is a distinct species, whose status will be discussed in a separated paper.

Current status. Chrysura dichroa minor (Mocsáry, 1889).

Chrysis erigone Mocsáry, 1889

(Plate 18A-18F)

Chrysis (Olochrysis) Erigone Mocsáry 1889: 239.

Type locality. Caucasus: "Caucasus (Coll. Rad.! et Mus. Hung.)".

Lectotype, ♀: Kaukasus // *Erigone* Mocs. typ. det. Mocsáry // red label // Lectotypus *Chrysis erigone* ♀ Mocs. RMB // id nr. 135642 HNHM Hym. coll..

Remarks. Bohart (in Bohart & French 1986) designated the lectotype. One paralectotype is deposited at Radoszkowski's collection in ISEA-PAN (Rosa *et al.* 2015e).

Current status. Chrysura erigone (Mocsáry, 1889) (transferred by Kimsey & Bohart 1991).

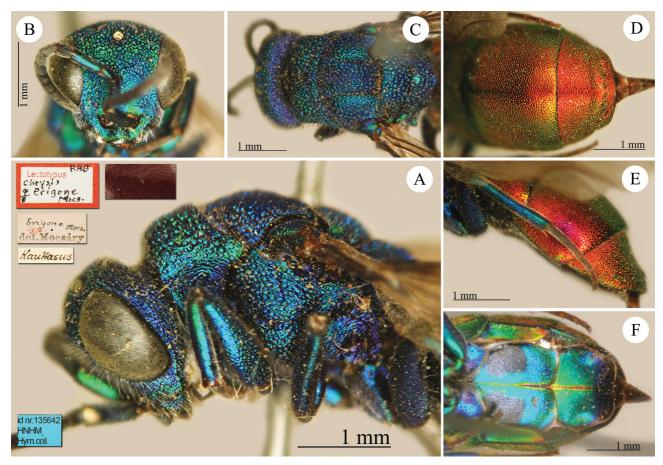


PLATE 18. *Chrysis erigone* Mocsáry, 1889, lectotype ♀. **A**. Head and mesosoma, lateral view; **B**. Head, frontal view; **C**. Head and mesosoma, dorsal view; **D**. Metasoma, lateral view; **E**. Metasoma, posterior view; **F**. Metasoma, ventral view.

Chrysis erythrocera Mocsáry, 1909

(Plate 19A-19F)

Chrysis (Tetrachrysis) erythrocera Mocsáry 1909: 6.

Type locality. Kazakhstan: "Baigakum, penes Djulek 31.V.-6.VI.1907".

Lectotype, &: Baigakum bei Djulek Turkest. L. Wollmann / 31.V.1907 // *erythrocera* Mocs. typ. det. Mocsáry // Lectotypus *Chrysis erythrocera* & Mocs. RMB // id nr. 135393 HNHM Hym. coll..

Paralectotypes, 2♂♂: Baigakum bei Djulek Turkest. L. Wollmann / 9.IV.1907 // Espéce inconnue moi // erythrocera Mocs. typ. det. Mocsáry // Paralectotypus Chrysis erythrocera ♂ Mocs. RMB // id nr. 135394, 135395 HNHM Hym. coll.; 1♂: Baigakum bei Djulek Turkest. L. Wollmann / 2.VI.1907 // erythrocera Mocs. typ. det. Mocsáry // Paralectotypus Chrysis erythrocera ♂ Mocs. RMB // id nr. 135396 HNHM Hym. coll..

Current status. Chrysis erythrocera Mocsáry, 1909.

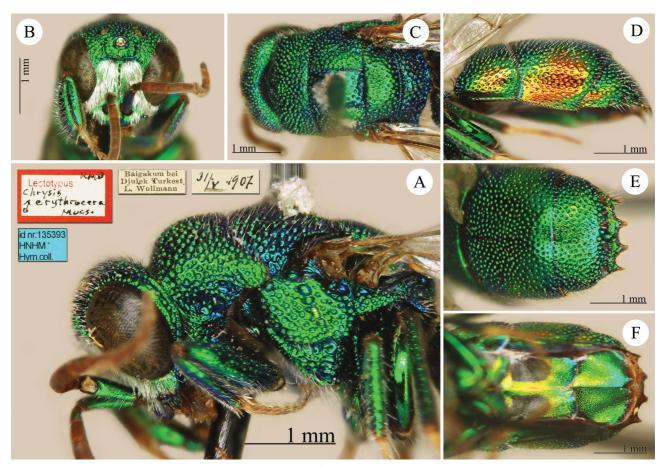


PLATE 19. *Chrysis erythrocera* Mocsáry, 1909, lectotype ♂. **A**. Head and mesosoma, lateral view; **B**. Head, frontal view; **C**. Head and mesosoma, dorsal view; **D**. Metasoma, lateral view; **E**. T2 and T3, posterior view; **F**. Metasoma, ventral view.

Chrysis euchroma Mocsáry, 1902

Chrysis (Pentachrysis) euchroma Mocsáry 1902a: 345.

Type locality. Croatia: "Littorale Hungaricum, ad Zengg [= Senj] a Dom. Padewieth die 15. Julii 1901, detecta (Mus. Hung.)".

Holotype, ♂: Haskapce plantaje (ad Zengg Padewieth) // as Zengg Padewieth // euchroma Mocs. typ. det. Mocsáry // red label // Holotypus *Chr.* (*Penta-*) euchroma Mocsáry // *Petachrysis megerlei* Dhlb. synonym euchroma Mocs. des. W. Trautmann // *Pentachrysis Megerlei* Dhlb. det. Mader // id nr. 135528 HNHM Hym. coll..

Current status. *Praestochrysis megerlei* (Dahlbom, 1854) (synonymised by Trautmann 1927, and transferred by Kimsey & Bohart 1991).

Chrysis eversmanni Mocsáry, 1912

Chrysis (Tetrachrysis) eversmanni Mocsáry 1912a: 407.

Type locality. "Turkestania (Mus. Hung.)".

Holotype, ♂: Turkestan // *Eversmanni* Mocs. typ. det. Mocsáry // red label // Holotypus *Chrysis eversmanni* Mocs. ♂ RM Bohart // id nr. 135304 HNHM Hym. coll..

Remarks. Linsenmaier (1959a, 1968) considered *Ch. eversmanni* Mocsáry, 1912 as a valid species because overlooked the name *C. dentipes* Radoszkowski, 1877.

Current status. Chrysis dentipes Radoszkowski, 1877 (synonymised by Kimsey & Bohart 1991).

Chrysis exsulans asiatica Linsenmaier, 1951

(Plate 20A–20F)

Chrysis (Chrysis) exsulans var. asiatica Linsenmaier 1951: 82, nom. praeocc. nec Mocsáry 1889.

Chrysis (Chrysis) exsulans ssp. castigata Linsenmaier 1959a: 155. Replacement name for C. exsulans var. asiatica Linsenmaier 1951 nec Mocsáry 1889.

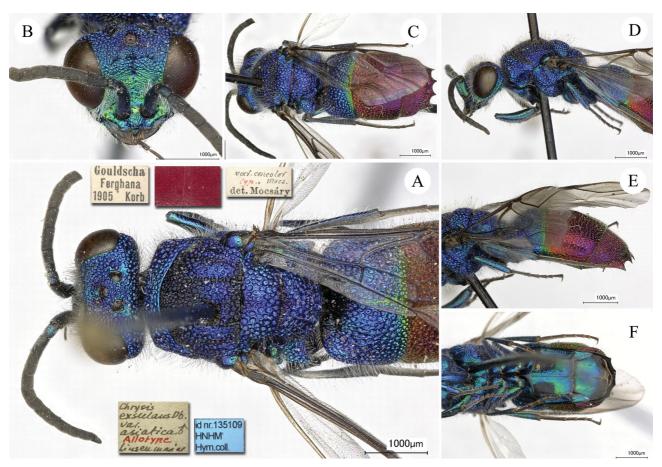


PLATE 20. *Chrysis* (*Chrysis*) *exsulans asiatica* Linsenmaier, 1951, allotype, ♂ [= *Chrysis fulgida concolor* Mocsáry 1912, paralectotype, ♂]. **A**. Head, mesosoma, and T1, dorsal view; **B**. Head, frontal view; **C**. Habitus, dorsal view; **D**. Head, mesosoma and T1, lateral view; **E**. Metasoma, lateral view; **F**. Metasoma, ventral view.

Type locality. Uzbekistan: "Turkestan, Ferghana".

Holotype, ♀: Turkestan Wernyi // var. *concolor* Mocs. typ. det. Mocsáry // red label // Coll. Mus. Nat. Hung. *Chrysis exsulans* Db. var. *asiatica* ♀ Type Linsenmaier // *exsulans* var. *asiatica* // id nr. 135110 HNHM Hym. coll..

Allotype, 1 \circlearrowleft : Gouldscha Ferghana 1905 Korb // red label // var. *concolor* Mocs. typ. det. Mocsáry // *Chrysis exsulans* var. *asiatica* \circlearrowleft Allotype Linsenmaier // id nr. 135109 HNHM Hym. coll..

Paratype, 1♀: Turkestan Wernyi // var. *concolor* Mocs. typ. det. Mocsáry // red label // Coll. Mus. Nat. Hung. *Chrysis exsulans* Db. var. *asiatica* ♀ Cotype Linsenmaier // *exsulans* var. *asiatica* // id nr. 135108 HNHM Hym. coll

Remarks. These three specimens are also syntypes of *Chrysis fulgida* var. *concolor* Mocsáry, 1912. Linsenmaier (1959a) replaced the name *Ch. exsulans asiatica* Linsenmaier, 1951 with *Ch. exsulans castigata*, and later (Linsenmaier 1997) raised it to species rank.

Current status. Chrysis castigata Linsenmaier, 1968.

Chrysis fallax Mocsáry, 1882

Chrysis (Gonochrysis) fallax Mocsáry 1882: 52 [Hungarian], 85 [Latin].

Type locality. Hungary and Romania: "In Hungaria centrali et meridionali-orientali valde rara est", "Budpestnél (Anker) és Nagyvárad mellett (Mocs.).

Lectotype, ♀: Nagyvárad // 7 // Nagyvárad mellett 1875 leg. Mocsáry // 402-116 // Lectotypus ♀ *Chrysis fallax* Mocsáry // id nr. 135092 HNHM Hym. coll..

Paralectotypes, 1♀: Budapest Mocsáry // Paralectotypus ♀ *Chrysis fallax* Mocsáry // id nr. 135089 HNHM Hym. coll.; 1♀: Budapest Vidéke 1879 // 1879 leg. Anker // 528-20 // Paralectotypus ♀ *Chrysis fallax* Mocsáry // id nr. 135090 HNHM Hym. coll.; 1♀: Gyapju Biharm. // Paralectotypus ♀ *Chrysis fallax* Mocsáry // id nr. 135091 HNHM Hym. coll..

Remarks. Móczár (1965) designated the lectotype. According to Linsenmaier (1959a, 1968, 1987), *Chrysis subsimuata fallax* Mocsáry, 1882 is the Oriental subspecies distributed from southeast Europe to Middle East and Central Asia. One specimen labelled: Brussa Merkl // Autotyp. // *fallax* Mocs. Typ. det. Mocsáry // red label // id nr. 135107 HNHM Hym. coll. is an "autotype" and does not belong to the type series.

Current status. Chrysis subsinuata fallax Mocsáry, 1882.

Chrysis filiformis Mocsáry, 1889

Chrysis (Olochrysis) filiformis Mocsáry 1889: 266.

Type locality. Croatia: "Hungariae meridionalis montes (Mus. Hung.) et Fanum Sancti Viti Flamoniensis Hungariae ad littora maris Adriatici (Fiume) (Korlević et Mus. Hung.)".

Lectotype, ♂: Fiume Korlevics // Lectotypus ♂ *Chrysis filiformis* Mocsáry <handwritten by Móczár> // id nr. 135634 HNHM Hym. coll..

Paralectotype, 1♀: Krapina Madarag // 4. // Paralectotypus ♀ *Chrysis filiformis* Mocsáry <handwritten by Móczár> // id nr. 135633 HNHM Hym. coll.; 1 ex. [sex unknown]: Fiume Korlevics // Paralectotypus *Chrysis filiformis* Mocsáry <handwritten by Móczár> // id nr. 135635 HNHM Hym. coll..

Remarks. Móczár (1965: 169) designated the lectotype.

Current status. Chrysura filiformis (Mocsáry, 1889) (transferred by Kimsey & Bohart 1991).

Chrysis (Tetrachrysis) flexuosa Mocsáry, 1912

(Plate 21A–21F)

Chrysis (Tetrachrysis) flexuosa Mocsáry 1912b: 590.

Type locality. Caucasus: Caucasus (Mus. Hung.).

Holotype, ♂: Caucasus // *flexuosa* Mocs. typ. det. Mocsáry // Holotypus *Chrysis flexuosa* ♂ Mocs. RMB // id nr. 135386 HNHM Hym. coll..

Remarks. Chrysis flexuosa Mocsáry belongs to the succincta species-group.

Current status. Chrysis flexuosa Mocsáry, 1912.

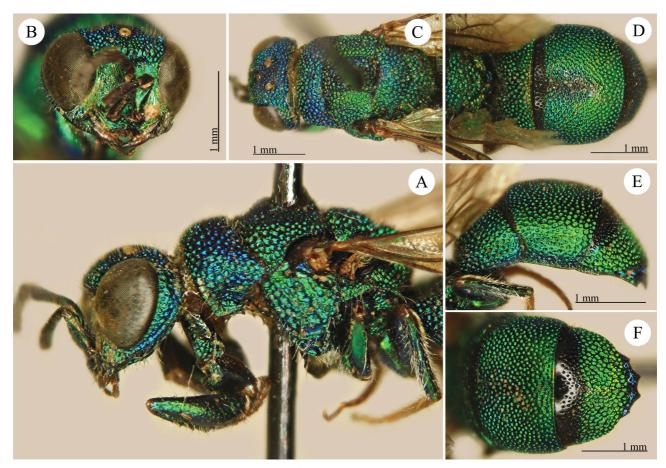


PLATE 21. *Chrysis flexuosa* Mocsáry, 1912, holotype ♂. **A**. Head and mesosoma, lateral view; **B**. Head, frontal view; **C**. Head and mesosoma, dorsal view; **D**. Metasoma, dorsal view; **E**. Metasoma, lateral view; **F**. T2 and T3, posterior view.

Chrysis frivaldszkyi Mocsáry, **1882** (Plate 22A–22D)

Chrysis (Gonochrysis) Frivaldszkyi Mocsáry 1882: 52 [Hungarian], 85 [Latin].

Type locality. Hungary: "In Hungaria centrali ad Budapestinum aestate rara est", "Budapest mellett a kinestári erdőnél jun. 12. (Mocs.) és a budai vasút körűl aug. 21. (Pável)".

Lectotype, &: Rinch juni 12 // 475-98 // Budapest 1878 leg. Mocsáry // Lectotypus & *Chrysis frivaldszkyi* Mocsáry // id nr. 135088 HNHM Hym. coll..

Remarks. Móczár (1965) designated the lectotype. *Chrysis frivaldszkyi* Mocsáry, 1882 was always considered as a valid species after Linsenmaier (1959a). Kimsey & Bohart (1991:468) placed it in synonymy of *Ch. succincta* Linnaeus, 1767, but it was soon revalidated by Strumia (1995: 5) and subsequent authors (e.g. Linsenmaier 1997, Rosa 2005). In literature, this taxon was often mispelled: *Ch. friwaldszkyi* (Berland & Bernard 1938), *Ch. frivaldskyi* (Linsenmaier 1959a, 1968; Strumia 1995), *Ch. frivaldszkii* (Kimsey & Bohart 1991). We suggest the use of the original spelling is *Ch. frivaldszkyi*.

Current status. Chrysis frivaldszkyi Mocsáry, 1882.

Chrysis fulgida aurolimbata Móczár, 1946

Chrysis fulgida var. aurolimbata Móczár 1946: 27, nom. praeocc. nec Mocsáry 1889.

Type locality. Hungary: "2♀♀ és 1♂ Kiskunfélegyháza. 1936.VII.3. Izsáki-út; 1943.VIII.3. Nagyszöll-út menti árokpart.

Lectotype, &: Félegyháza Móczár // Lectotypus & Chr. fulgida var. aurolimbata Móczár // Chrysis L. fulgida L. Linsenmaier det. 59 // Chrysis fulgida L. det. Zimmermann // id nr. 135102 HNHM Hym. coll..

Remarks. Móczár (1965) designated the lectotype. *Chrysis fulgida aurolimbata* Móczár, 1946 is a primary homonym of *Ch. aurolimbata* Mocsáry, 1889, an Afrotropical species of *maindroni* species-group.

Current status. Chrysis fulgida Linnaeus, 1761 (synonymised by Linsenmaier 1959a).

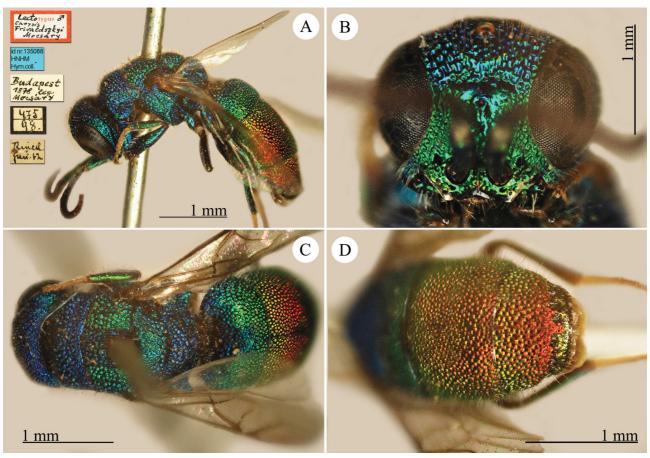


PLATE 22. Chrysis frivaldszkyi Mocsáry, 1882, lectotype, 3. A. Habitus, lateral view; B. Head, frontal view; C. Habitus, dorsal view; D. T2 and T3, posterior view.

Chrysis fulgida concolor Mocsáry, 1912

Chrysis (Tetrachrysis) fulgida var. concolor Mocsáry 1912b: 586.

Type locality. Russia and Uzbekistan: "Turkestania: Gouldscha in Ferghana et Wernyi; Sibiria orientalis: Raddefka (Mus. Hung.)".

Lectotype, \circlearrowleft : Sibiria or. Raddefka // var. *concolor* Mocs. typ. det. Mocsáry // Lectotypus \circlearrowleft *Chrysis fulgida concolor* Mocs. RMB // id nr. 135083 HNHM Hym. coll..

Paralectotypes, ♀: Turkestan Wernyi // var. concolor Mocs. typ. det. Mocsáry // red label // Coll. Mus. Nat. Hung. Chrysis exsulans Db. var. asiatica ♀ Cotype Linsenmaier // exsulans var. asiatica / id nr. 135108 HNHM Hym. coll.; 1♀: Turkestan Wernyi // var. concolor Mocs. typ. det. Mocsáry // red label // Coll. Mus. Nat. Hung. Chrysis exsulans Db. var. asiatica ♀ Type Linsenmaier // exsulans var. asiatica // id nr. 135110 HNHM Hym. coll.; 1♂: Turkestan Wernyi // var. concolor Mocs. typ. det. Mocsáry // Paralectotypus ♂ Chrysis fulgida concolor Mocs. typ. det. Mocsáry // Paralectotypus ♂ Chrysis fulgida concolor Mocs. typ. det. Mocsáry // Paralectotypus ♂ Chrysis fulgida concolor Mocs. typ. det. Mocsáry // Paralectotypus ♂ Chrysis fulgida concolor Mocs. RMB //id nr. 135084 HNHM Hym. coll.; 1♂:

Gouldscha Ferghana 1905 Korb // red label // var. *concolor* Mocs. typ. det. Mocsáry // *Chrysis exsulans* var. *asiatica* $\stackrel{\wedge}{\circ}$ Allotype Linsenmaier // id nr. 135109 HNHM Hym. coll..

Remarks. Bohart (in Bohart & French 1986) designated the lectotype. The syntypes from Turkestan are also holotype and paratypes of *Chrysis exsulans* var. *asiatica* Linsenmaier, 1951 (currently *Ch. castigata*) and belong to a different species.

Current status. Chrysis fulgida Linnaeus, 1761 (synonymised by Linsenmaier 1951).

Chrysis gertabi Radoszkowski, 1891

Chrysis gertabi Radoszkowski 1891: 189.

Type locality: Turkmenistan: "Ashabad".

Syntype, 1♂: Ashabad *Gertabi* Rad. n. sp. <handwritten by Radoszkowski and Mocsáry> // Transcapia // *Chrysis mutabilis* v. *Germari* (!) Rad det. Mocsáry // id nr. 115619 HNHM Hym. coll..

Remarks. Other two syntypes are housed in the Radoszkowski collection in ISEA-PAS and in MNHU.

Current status. Chrysis mutabilis du Buysson, 1887 (synonymised by Kimsey & Bohart 1991).

Chrysis goliath cyanescens Mocsáry, 1913

Chrysis (Pentachrysis) goliath var. cyanescens Mocsáry 1913a: 1.

Type locality. Armenia and Turkey: "Asia minor: Bimbirkilisse [= Binbirkilise]; Armenia rossica: Kulp (Mus. Hung.)".

Lectotype, &: Asia min. Náday 1911 // Bimbirkilissze // v. *cyanescens* Mocs. typ. det. Mocsáry // red label // Lectotypus *Chrysis gol. cyanescens* Mocs. & RM Bohart // id nr. 135531 HNHM Hym. coll..

Paralectotype, \circlearrowleft : Armenia Rossica Kulp // *Chrysis arrogans* Mocs. // v. *cyanescens* Mocs. typ. det. Mocsáry // red label // Paralectotypus *Chrysis gol. cyanescens* Mocs. \circlearrowleft RM Bohart // id nr. 135530 HNHM Hym. coll.

Remarks. Bohart (in Bohart & French 1986) designated the lectotype.

Current status. *Pentachrysis arrogans* (Mocsáry, 1889) (synonymised and transferred by Kimsey & Bohart 1991).

Chrysis gujaratica Nurse, 1903

Chrysis gujaratica Nurse 1903a: 11.

Type locality. India (Gujarat): "Deesa".

Paralectotypes, 1♀: Deesa // Chrysis gujaratica ♀ Nurse <handwritten by Nurse> // gujaratica Nurse Bingham typ. // id nr. 115651 HNHM Hym. coll.; 1♂: Deesa // Chrysis gujaratica ♂ Nurse <handwritten by Nurse> // gujaratica Nurse Bingham typ. // id nr. 115652 HNHM Hym. coll.; 2♂♂ and 1♀: Deesa 3.01 // gujaratica Cotyp. Nurse // id nr. 115653, 115654, 115655 HNHM Hym. coll.; 1♀: Deesa 3.01 // Chrysis gujaratica (Nurse) <handwritten by Mocsáry> // gujaratica Cotyp. Nurse // id nr. 115656 HNHM Hym. coll..

Remarks. Bohart (in Kimsey & Bohart 1991: 416) designated the lectotype deposited at BMNH. Other two paralectotypes are housed at NHMW.

Current status. Chrysis gujaratica Nurse, 1903.

Chrysis hellenica Mocsáry, 1913

(Plate 23A–23D)

Chrysis (Euchroeus) hellenica Mocsáry 1913a: 43.

Type locality. Greece: "Graecia: Attica (Mus. Hung.)".

Holotype, \bigcirc : Attica Krüper // hellenica Mocs. typ. det. Mocsáry // Holotype \bigcirc Chrysis hellenica Mocsáry // id nr. 135673 HNHM Hym. coll..

Current status. Euchroeus hellenicus (Mocsáry, 1913) (transferred by Trautmann 1927).

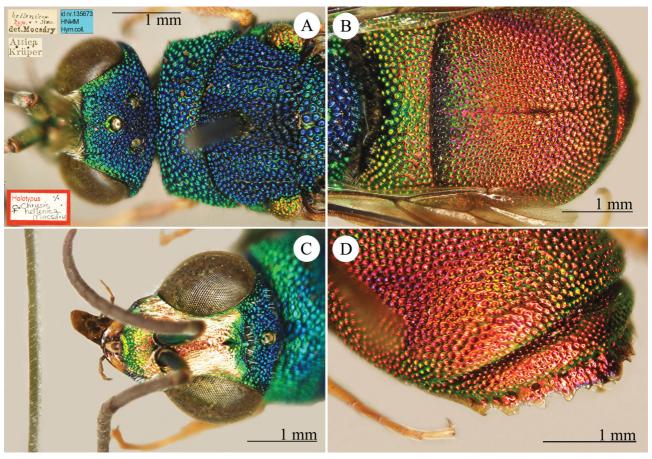


PLATE 23. *Chrysis hellenica* Mocsáry, 1913, holotype, ♀. **A**. Head, pronotum and mesoscutum, dorsal view; **B**. Metasoma, dorsal view; **C**. Head, frontal view; **D**. T3, dorso-lateral view.

Chrysis hoggei Nurse, 1903

Chrysis hoggei Nurse 1903b: 40.

Type locality. Pakistan: "Quetta, a few specimens".

yntype, ♂: Quetta // Chrysis hoggei ♂ Nurse <handwritten by Nurse> // Chrysis perfecta Cam. Race hoggei ♂ Nurse <handwritten by Nurse> // Collect. Bingham // perfecta Cam. det. Bingham // Chrysis perfecta Cam. det. Bingham // id nr. 135341 HNHM Hym. coll..

Remarks. In Kimsey & Bohart (1991) the type depository is unknown and the taxon is considered as valid. Another syntype is housed in BMNH. We follow Bingham (1903), who examined the types of Nurse and Cameron and consider *Chrysis hoggei* Nurse, 1903 as a synonym of *Ch. perfecta* Cameron, 1897.

Current status. Chrysis perfecta Cameron, 1897 (synonymised by Bingham 1903).

Chrysis horvathi Mocsáry, 1912

(Plate 24A-24F)

Chrysis (Tetrachrysis) Horváthi Mocsáry 1912b: 591.

Type locality. Turkey: "Asia Minor: Smyrna [= İzmir] et Bimbirkilissze [= Binbirkilise], aestate (Mus. Hung.)".

Lectotype, ♀: Burnabat Smyrna // *Horvthi* Mocs. typ. det. Mocsáry // red label // Lectotypus ♀ *Chrysis horvathi* Mocs. RMB // id nr. 135173 HNHM Hym. coll..

Paralectotype, ♀: Burnabat Smyrna / 1902.VII // Horvthi Mocs. typ. det. Mocsáry // red label // Paralectotypus ♀ Chrysis horvathi Mocs. RMB // id nr. 135174 HNHM Hym. coll.; 1♀: Burnabat Smyrna / 1902.VIII // Chrysis n. sp. // Horvthi Mocs. typ. det. Mocsáry // red label // Paralectotypus ♀ Chrysis horvathi Mocs. RMB // id nr. 135175 HNHM Hym. coll.; 1♀: Asia min. Náday 1911 // 25.VI // Bimbirkilissze // Horvthi Mocs. typ. det. Mocsáry // red label // Paralectotypus ♀ Chrysis horvathi Mocs. RMB // id nr. 135176 HNHM Hym. coll..

Remarks. Bohart (in Bohart & French 1986) designated the lectotype. *Chrysis horvathi* Mocsáry, 1912 belongs to the *succincta* species-group.

Current status. Chrysis horvathi Mocsáry, 1912.

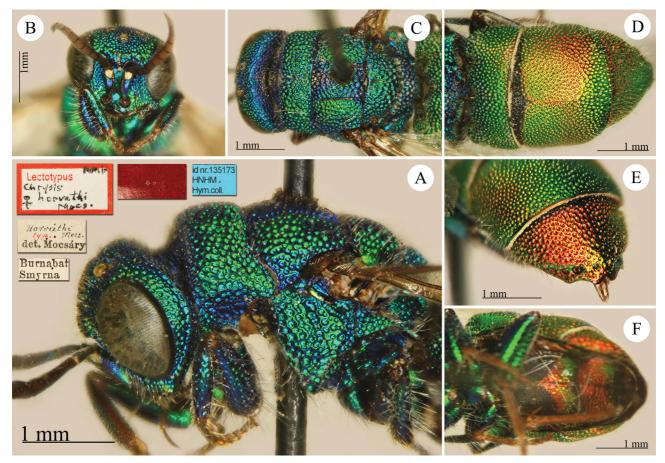


PLATE 24. *Chrysis horvathi* Mocsáry, 1912, lectotype ♀. **A.** Head and mesosoma, lateral view; **B.** Head, frontal view; **C.** Head and mesosoma, dorsal view; **D.** Metasoma, dorsal view; **E.** T2 and T3, postero-lateral view; **F.** Metasoma, ventral view.

Chrysis hyacinthina Mocsáry, 1912

Chrysis (Tetrachrysis) hyacinthina Mocsáry 1912: 410.

Type locality. Kyrgyzstan: "Turkestania: Montes Alexandri (Mus. Hung.)".

Holotype, ♂: Turkestan Mt. Alexander // *hyacinthina* Mocs. typ. det. Mocsáry // red label // Holotypus ♂ *Chrysis hyacinthina* Mocs. ♀ RMB // id nr. 135313 HNHM Hym. coll..

Current status. Chrysis montivaga Mocsáry, 1912 (synonymised by Kimsey & Bohart 1991).

Chrysis ignita chinensis Mocsáry, 1912

Chrysis (Tetrachrysis) ignita var. chinensis Mocsáry 1912b: 589.

Type locality. China: "Shangai [= Shanghai] (Mus. Hung.)".

Holotype, ♀: China Shangai // v. *chinensis* Mocs. typ. det. Mocsáry // Holotypus ♀ *Chrysis ignita* var. *chinensis* Mocs. RMB // id nr. 135401 HNHM Hym. coll..

Remarks. Pictures of the holotype are in Rosa et al. (2014: 98, plate 35).

Current status. Chrysis chinensis Mocsáry, 1912 was raised at species rank by Linsenmaier (1959a).

Chrysis ignita cuprata Mocsáry, 1890

Chrysis (Tetrachrysis) ignita var. cuprata Mocsáry 1890: 64, nom. praeocc. nec Dahlbom 1854.

Type locality. Greece: "Graecia (Mus. Hung.)".

Lectotype, ♀: Graecia Krüper // v. *cuprata* Mocs. typ. Mocsáry // red label // Lectotypus *Chrysis ignita cuprata* ♀ Mocs. RMB // id nr. 135164 HNHM Hym. coll..

Paralectotype, 1♀: Graecia Krüper // v. *cuprata* Mocs. typ. Mocsáry // red label // Paralectotypus *Chrysis ignita cuprata* ♀ Mocs. RMB // id nr. 135163 HNHM Hym. coll..

Remarks. Bohart (in Bohart & French 1896) designated the lectotype.

Current status. Chrysis ignita (Linnaeus, 1758) (synonymised by Kimsey & Bohart 1991).

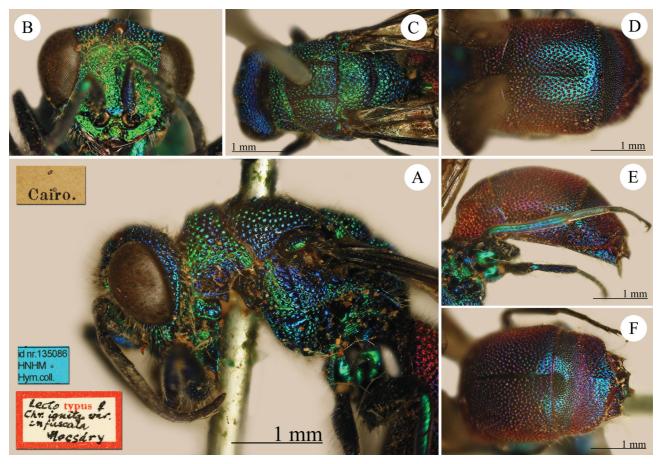


PLATE 25. *Chrysis ignita infuscata* Mocsáry, 1889, lectotype ♀. **A.** Head and mesosoma, lateral view; **B.** Head, frontal view; **C.** Head and mesosoma, dorsal view; **D.** Metasoma, dorsal view; **E.** Metasoma, lateral view; **F.** T2 and T3, dorsal view.

Chrysis ignita infuscata Mocsáry, 1889

(Plate 25A-25F)

Chrysis (Tetrachrysis) ignita var. infuscata Mocsáry 1889: 490, nom. praeocc. nec Brullé 1846.

Type locality. Egypt: "Aegyptus (Cairo. Coll. Saussurei! et Mus. Turicense!)".

Lectotype, ♀: Cairo // Lectotypus ♀ *Chr. ignita* var. *infuscata* Mocsáry // id nr. 135086 HNHM Hym. coll..

Paralectotype, 1♀: Cairo // Paralectotypus ♂ (!) *Chr. ignita* var. *infuscata* Mocsáry // Coll. Mus. Nat. Hung. // id nr. 135086 HNHM Hym. coll..

Remarks. Móczár (1965: 175) designated the lectotype. The syntype of *Ch. ignita* var. *infuscata* Mocsáry, 1889 was not found in de Saussure's collection in MHNG; probably Mocsáry kept the type for his collection. Linsenmaier (1999: 219) considered *infuscata* as a valid subspecies. The type specimens are distinct from the typical European *Ch. ignita* (Paukkunen *et al.* 2015) and very likely *infuscata* is a separate species, as recently recognized for some of the European subspecies of *Ch. ignita* (Soon *et al.* 2014; Mitroiu *et al.* 2015). Since the name *infuscata* is not available, we replace it with the name *Ch. fusca* **nom. nov.**, a Latin adjective chosen for the darkened colour of the metasoma, like the name *Ch. infuscata*, meaning darkened.

Current status. Chrysis fusca Rosa, nom. nov..

Chrysis ignita japonica Mocsáry, 1889

(Plate 26A-26F)

Chrysis (Tetrachrysis) ignita var. Japonica Mocsáry 1889: 490, nom. praeocc. nec Cameron 1888. Chrysis niponica Uchida 1933: 4. Replacement name for Ch. ignita var. japonica Mocsáry 1889 nec Cameron 1888.

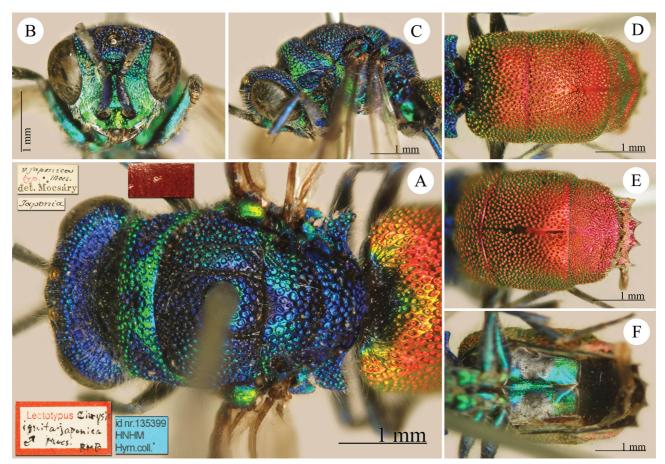


PLATE 26. *Chrysis ignita japonica* Mocsáry, 1889, lectotype ♀ (not ♂). **A.** Head and mesosoma, dorsal view; **B.** Head, frontal view; **C.** Head and mesosoma, lateral view; **D.** Metasoma, dorsal view; **E.** T2 and T3, dorsal view; **F.** Metasoma, ventral view.

Type locality. Japan: "Japonia (Coll. Saussurei)".

Lectotype, ♀ [not ♂]: Japonia // v. *japonica* Mocs. typ. det. Mocsáry // red label // Lectotypus *Chrysis ignita* var. *japonica* ♂ Mocs. RMB // id nr. 135399 HNHM Hym. Coll..

Remarks. Bohart (in Bohart & French 1986) designated the lectotype. As in the case of *Ch. ignita* var. *infuscata* Mocsáry, 1889, we think that Mocsáry kept the type for his collection; the type was not found in de Saussure's collection in MHNG. The lectotype is damaged and lacks tarsi of all legs and most of flagellomeres on both antennae.

Current status. Chrysis niponica Uchida, 1933.

Chrysis ignita mediadentata Linsenmaier, 1951

Chrysis (Chrysis) ignita var. mediadentata Linsenmaier 1951: 75.

Type locality. Europe.

Paralectotypes, 1*\(\delta\)*: *ignita* L. v. *mediadentata \delta\)* Lins. N. Österreich Mader Linsenmaier // id nr. 115600 HNHM Hym. coll.; 1♀: *ignita* L. v. *mediadentata* ♀ Lins. N. Österreich Mader Linsenmaier // id nr. 115601 HNHM Hym. coll..

Remarks. Linsenmaier (1959a: 157) designated a male of *Chrysis ignita* var. *mediadentata* from Switzerland (Wallis) as the lectotype (NMLS). The specimens bear the typical original Linsenmaier's label handwritten before 1951 (Rosa *et al.* 2015b).

Current status. Chrysis mediadentata Linsenmaier, 1951 was raised at species rank by Schmid-Egger et al. (1995).

Chrysis ignita mediata Linsenmaier, 1951

Chrysis (Chrysis) ignita var. mediata Linsenmaier 1951: 76.

Type locality. Europe.

Paralectotype, 1♂: *ignita* L. v. *mediata* ♂ Rigi 5.49 Linsenmaier // *Chr. ignita* var. *curvidens* Dhlb. det. Móczár // *Chrysis mediata* Linsenmaier, 1951 det. Muskovits, 2011 // id nr. 115602 HNHM Hym. coll.

Remarks. Linsenmaier (1959a: 154) designated a female from Switzerland (Wallis) deposited at NMLS as the lectotype. The specimen bears the original handwritten label by Linsenmaier (Rosa *et al.* 2015b) and it can be considered as part of the type series, as in the case of *Ch. ignita mediadentata* Linsenmaier, 1951.

Current status. Chrysis mediadentata Linsenmaier, 1951 was raised at species rank by Linsenmaier (1959a).

Chrysis ignita sculpturata Mocsáry, 1912

(Plate 27A-27F)

Chrysis (Tetrachrysis) ignita var. sculpturata Mocsáry 1912b: 589.

Type locality. Portugal: "Portugalia (Mus. Hung.)".

Holotype, ♀: Maio // 1909 // Setubal // leg. Tavares // v. *sculpturata* Mocs. typ. Mocsáry // red label // Holotypus *Chrysis ignita sculpturata* ♀ Mocs. RMB // id nr. 135166 HNHM Hym. coll..

Remarks. Soon & Sarma (2011) revalidated *Ch. sculpturata* Mocsáry from the synonymy with *Ch. lusitanica* Bischoff, 1910, proposed by Kimsey & Bohart (1991). The latter is indeed similar to *Ch. mediata* Linsenmaier for its punctuation with small punctures at the base of T2, general habitus and colouration.

Current status. Chrysis sculpturata Mocsáry, 1912 was raised at species rank by Linsenmaier (1959a).

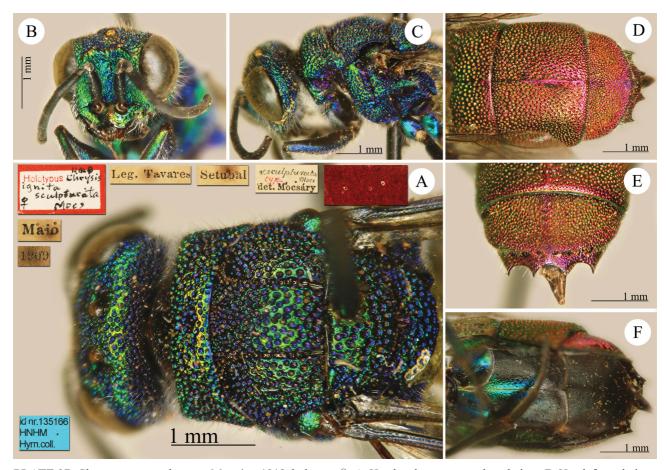


PLATE 27. *Chrysis ignita sculpturata* Mocsáry, 1912, holotype ♀. **A**. Head and mesosoma, dorsal view; **B**. Head, frontal view; **C**. Head and mesosoma, lateral view; **D**. Metasoma, dorsal view; **E**. T3, posterior view; **F**. Metasoma, ventral view.

Chrysis ignita valida Mocsáry, 1912 (Plate 28A–28F)

Chrysis (Tetrachrysis) ignita var. valida Mocsáry 1912b: 589.

Type locality. Galicia, Germany, Hungary: "Hungaria: Budapest, Germania: Munchen et Halicia: montes Beszkid. (Mus. Hung.)".

Lectotype, ♀: Budapest Emich // v. *valida* Mocs. typ. det. Mocsáry // Lectotypus ♀ *Chr. ignita* var. *valida* Mocsáry // id nr. 135400 HNHM Hym. coll..

Remarks. Móczár (1965: 176) designated the lectotype.

Current status. Chrysis valida Mocsáry, 1889 was raised at species rank by Linsenmaier (1959a).

Chrysis incisa exadversa Linsenmaier, 1959

Chrysis (Chrysis) incisa ssp. exadversa Linsenmaier 1959b: 238.

Type locality. Greece: mainland and Crete, Israel: "Palästina, Kreta, Griechenland. ♂ Type coll. m., Paratypen Coll. Bytinski-Salz un Coll. m. (Jerusalem, V., leg. Bytinski-Salz). ♀ Allotype Coll. m. (Kreta, leg. Mavromoustakis).

Paratype, 1♂: Olympia 12.V.01 // *incisa* Ab Bu // *Chrysis incisa* Buyss. det. Mocsáry // ♂ Paratypus *Chrysis* L. *incisa exadversa* Lins. Linsenmaier det. 59 // id nr. 135407 HNHM Hym. coll

Current status. Chrysis incisa exadversa Linsenmaier, 1959.

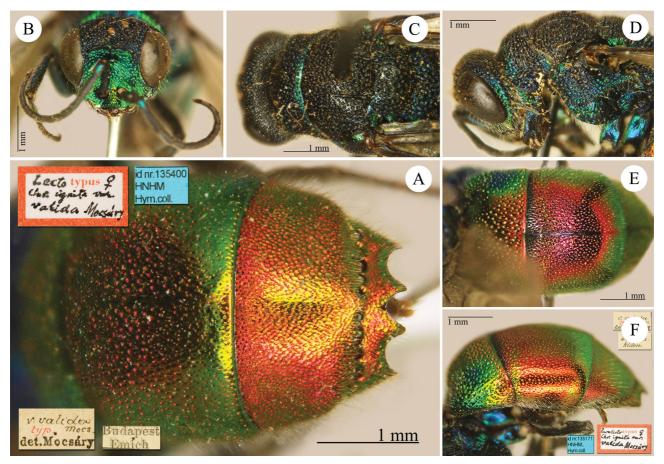


PLATE 28. *Chrysis ignita valida* Mocsáry, 1912, lectotype ♀. **A.** T2 and T3, posterior view; **B.** Head, frontal view; **C.** Head and mesosoma, dorsal view; **D.** Head and mesosoma, lateral view; **E.** Metasoma, dorsal view; **F.** Metasoma, lateral view.

Chrysis infans Mocsáry, 1912

(Plate 29A-29D)

Chrysis (Tetrachrysis) infans Mocsáry 1912b: 592.

Type locality. Armenia: "Caucasus: Montes Armenici (Mus. Hung.)".

Holotype, ♂: Caucasus. Armen. Geb. Leder Reitter // *Chrysis* n. sp. // *infans* Mocs. typ. det. Mocsáry // red label // Holotypus *Chrysis infans* Mocs. ♂ RMB // id nr. 135406 HNHM Hym. coll..

Remarks. Chrysis infans Mocsáry, 1912 belongs to the varidens species-group.

Current status. Chrysis infans Mocsáry, 1912.

Chrysis kashgarica Mocsáry, 1912

Chrysis (Tetrachrysis) Kashgarica Mocsáry 1912b: 550.

Type locality. China [Xinjiang]: "Kashgar (Mus. Hung.)".

Holotype, ♂: Kashgar // *kashgarica* Mocs. typ. det. Mocsáry // red label // Holotypus *Chrysis kashgarica* Mocs. RMB // id nr. 135330 HNHM Hym. coll..

Current status. Chrysis kashgarica Mocsáry, 1912.

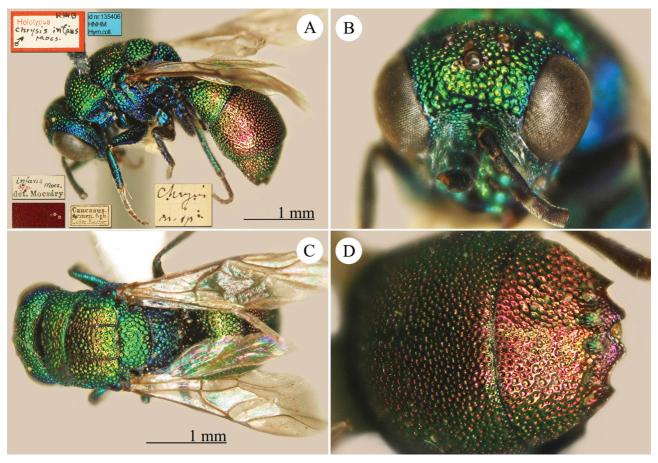


PLATE 29. *Chrysis infans* Mocsáry, 1912, holotype &. A. Habitus, lateral view; **B**. Head, frontal view; **C**. Habitus, dorsal view; **D**. T2 and T3, posterior view.

Chrysis kashmirensis Nurse, 1902

Chrysis kashmirensis Nurse 1902: 307.

Type locality. India: "Kashmire, 5000-6000 ft.; five specimens".

Paralectotype, 1♀: Kashmir 5-6000ft 5.01 // *Chrysis kashmirensis* Nurse Bingham typ. // *Kashmirensis* Bingh. det. Mocsáry // Paralectotypus ♀ *Chrysis kashmirensis* Mocsáry // id nr. 135116 HNHM Hym. coll..

Remarks. Bohart (in Kimsey & Bohart 1991: 491) designated the lectotype deposited at BMNH.

Current status. Chrysura kashmirensis (Nurse, 1902).

Chrysis kerteszi Mocsáry, 1912

(Plate 30A-30F)

Chrysis (Tetrachrysis) Kertészi Mocsáry 1912b: 587.

Type locality. Kazakhstan: *Turkestania septentrionalis: Perowsk* [= Kyzylorda] *Syr-Dariae 30.VI (Mus. Hung.)*. **Holotype,** ♀: Perowsk Syr-Darja Geb W. Nikolsky // 30.VI.1909 // *Kertészi* Mocs. typ. det. Mocsáry // Holotypus *Chrysis Kerteszi* ♀ Mocs. RMB // id nr. 135390 HNHM Hym. coll..

Remarks. Chrysis kerteszi Mocsáry, 1912 belongs to the comparata species-group.

Current status. Chrysis kerteszi Mocsáry, 1912.

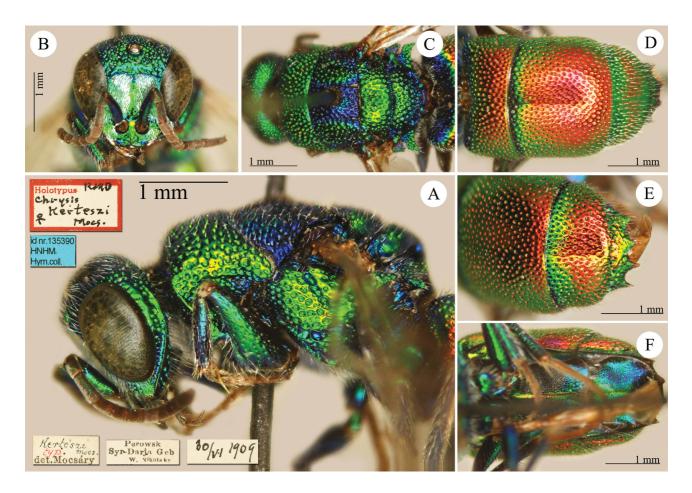


PLATE 30. *Chrysis kerteszi* Mocsáry, 1912, holotype ♀. **A.** Head and mesosoma, lateral view; **B.** Head, frontal view; **C.** Head and mesosoma, dorsal view; **D.** Metasoma, dorsal view; **E.** T2 and T3, posterior view; **F.** Metasoma, ventral view.

Chrysis kohlii Mocsáry, 1889

Chrysis (Olochrysis) Kohlii Mocsáry 1889: 275.

Type locality. Greece: "Graecia (Athenae. Mus. Vindob. !; Attica. Coll. Wüstnei!. Mus. Hung. et Mus. Atheniense!).

Syntypes, 1♀: Graecia Krüper // *Kohli* (!) Mocs. typ. det. Mocsáry // Lectotypus *Chrysis kohlii* Mocs. RMB // id nr. 135190 HNHM Hym. coll..; 1♂ and 1♀: Graecia Krüper // *Kohli* (!) Mocs. typ. det. Mocsáry // id nr. 135191, 135192 HNHM Hym. coll..

Remarks. *Chrysis kohli* Mocsáry, 1889 was described based on syntypes collected in Greece and preserved in the museum collections of Vienna, Budapest and Athen (collection unknown). One specimen in HNHM was labelled as lectotype by Bohart, but the lectotype designation was not published. Kimsey & Bohart (1991: 547) reported "holotype" in Paris, based on a specimen collected at Brussa [= Bursa] in Asia Minor by Mann in 1852. This Turkish specimen does not belong to the type series and cannot be considered as the lectotype (ICZN 1999: Article 74.5). In Kimsey & Bohart (1991: 428) *Ch.* (*Olochrysis*) *kohli* is listed as a valid species in the genus *Chrysis* and as a synonym of *Pseudospinolia marqueti* (du Buysson, 1887).

Current status. *Pseudospinolia marqueti* (du Buysson, 1887) (synonymised by Trautmann 1927, and transferred by Kimsey & Bohart 1991).

(Plate 31A-31F)

Chrysis (Tetrachrysis) Kolazyi Mocsáry 1889: 464.

Type locality. Austria: "Austria; a Clariss. Dom. J. Kolazy inventa mihique donata (Mus. Hung.)".

Holotype, ♀: Austria // 669-49 // *Kolazyi* Mocs. typ. det. Mocsáry // Coll. Mus. Nat. Hung. // Holotypus *Chrysis kolazyi* ♀ Mocs. RMB // id nr. 135389 HNHM Hym. coll..

Remarks. Linsenmaier (1968) highlighted the fact that *Chrysis kolazyi* was no longer collected in Austria after the description, and it was probably collected in Russia (Sarepta). We agree with Linsenmaier and the type locality Austria seems a case of locality in error. Rosa & Soon (2012) listed *Ch. kolazyi* only for Ukraine and the Cyclades Islands. In the Linsenmaier collection (NMLS) there is one specimen labelled as allotype, collected at Mykonos by Max Schwarz, which is not part of the type series. *Chrysis kolazyi* Mocsáry, 1889 belongs to the *succincta* speciesgroup.

Current status. Chrysis kolazyi Mocsáry, 1889.

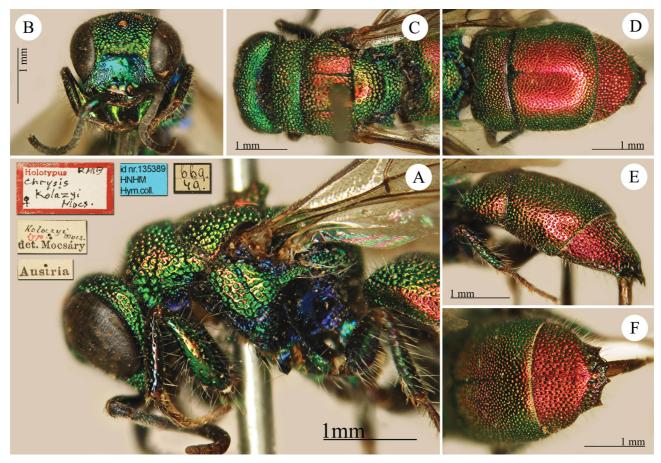


PLATE 31. *Chrysis kolazyi* Mocsáry, 1889, holotype ♀. **A**. Head and mesosoma, lateral view; **B**. Head, frontal view; **C**. Head and mesosoma, dorsal view; **D**. Metasoma, dorsal view; **E**. Metasoma, lateral view; **F**. T2 and T3, posterior view.

Chrysis korbiana Mocsáry, 1912

(Plate 32A-32F)

Chrysis (Tetrachrysis) Korbiana Mocsáry 1912a: 412.

Type locality. Uzbekistan: "Turkestania: Gouldsha in Fergana (Mus. Hung.)".

Lectotype, ♀: Gouldscha Ferghana 1905 Korb // Korbiana Mocs. typ. det. Mocsáry // red label // Lectotypus

Chrysis korbiana Mocsáry RMB // id nr. 135315 HNHM Hym. coll..

Paralectotypes, $3 \circlearrowleft \circlearrowleft$ and $1 \circlearrowleft$: Gouldscha Ferghana 1905 Korb // *Korbiana* Mocs. typ. det. Mocsáry // red label // Paralectotypus *Chrysis korbiana* Mocsáry RMB // id nr. 135314-135318 HNHM Hym. coll.; $3 \circlearrowleft \circlearrowleft$ and $3 \circlearrowleft \hookrightarrow$: Gouldscha Ferghana 1905 Korb // *Korbiana* Mocs. typ. det. Mocsáry // red label // id nr. 135319-135324 HNHM Hym. coll.; $16 \circlearrowleft \circlearrowleft$ and $1 \circlearrowleft$: Gouldscha Ferghana 1905 Korb // *Korbiana* Mocs. det. Mocsáry // id nr. 115628-115644 HNHM Hym. coll..

Remarks. Bohart (in Bohart & French 1986) designated the lectotype. *Chrysis korbiana* Mocsáry, 1912 belongs to the *ignita* species-group.

Current status. Chrysis korbiana Mocsáry, 1912.



PLATE 32. *Chrysis korbiana* Mocsáry, 1912, lectotype ♀. **A.** Head and mesosoma, dorsal view; **B.** Head, frontal view; **C.** Head and mesosoma, lateral view; **D.** Metasoma, lateral view; **E.** T3, posterior view; **F.** Metasoma, ventral view.

Chrysis kuthyi Mocsáry, 1889

Chrysis (Olochrysis) Kuthyi Mocsáry 1889: 212.

Type locality. Hungary: "Hungaria centralis (Mus. Hung.).

Holotype, ♂: Isaszegh Kuthy aug elején / VIII.1887 // Holotypus ♂ *Chrysis kuthyi* Mocsáry // id nr. 135076 HNHM Hym. coll..

Remarks. *Chrysis kuthyi* was considered as a variation (du Buysson 1895; Bischoff 1913; Linsenmaier 1951) or aberration (Móczár 1964b). It is a melanic form of *Pseudospinolia neglecta* (Shuckard, 1837), entirely black without metallic reflections.

Current status. *Pseudospinolia neglecta* (Shuckard, 1837) (synonymised and transferred by Kimsey & Bohart 1991).

Chrysis laevigata purpurascens Mocsáry, 1889

(Plate 33A-33D)

Chrysis (Olochrysis) laevigata var. purpurascens Mocsáry 1889: 272.

Type locality. Algeria: "Algeria (Oran, Mus. Hung.).

Holotype, ♀: Algeria // 1042-25 // *purpurascens* Mocs. typ. det. Mocsáry // red label // Holotypus *Chrysis purpurascens* ♀ Mocs. RMB // id nr. 135645 HNHM Hym. coll..

Current status. Chrysura laevigata purpurascens (Mocsáry, 1889) (transferred by Kimsey & Bohart 1991).

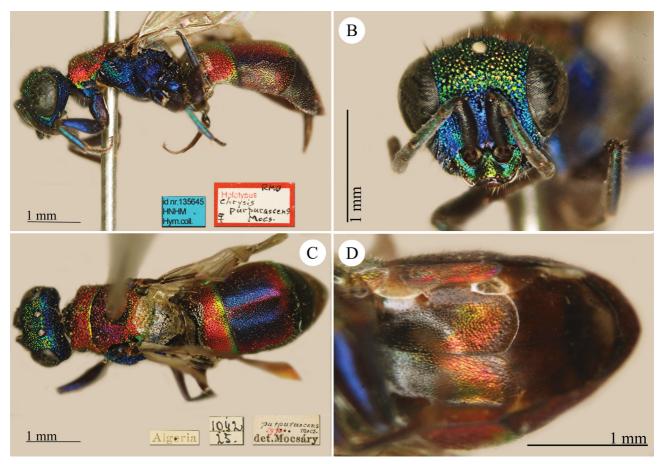


PLATE 33. *Chrysis laevigata* var. *purpurascens* Mocsáry, 1889, holotype ♀. **A**. Habitus, lateral view; **B**. Head, frontal view; **C**. Habitus, dorsal view; **D**. Metasoma, ventral view.

Chrysis lama Mocsáry, 1914

Chrysis (Tetrachrysis) Lama Mocsáry 1914: 45.

Type locality. Tibet: "Gyangtse pariter ex ea altitudine, et expeditione, sicuti priores (Mus. Brit.)".

Paralectotype, 1 \circlearrowleft : Gyangtse 13,000 ft. June 1904 Tibet Exped. H.J. Walton // 30.VI.1904 // *Tetrachrysis lama* Mocs. typ. det. Mocsáry // red label // id nr. 135325 HNHM Hym. coll..

Remarks. Bohart (in Kimsey & Bohart 1991: 431) designated the lectotype deposited at BMNH. Pictures of the specimen are in Rosa *et al.* (2015e: 105, plate 47). *Chrysis lama* Mocsáry belongs to the *ignita* species-group. **Current status.** *Chrysis lama* Mocsáry, 1914.

Chrysis lamprosoma Förster, 1853

(Plate 34A-34F)

Chrysis lamprosoma Förster 1853: 311.

Type locality. Turkey: Aus der Türkei. Von dem Herrn Dr. von Frivaldszky zur Ansicht erhalten.

Holotype, ♀: [small red label] // Turcia Frivaldszky // 781 // *Spinolia lamprosoma* Först. det. Mocsáry // *Spinolia lamprosoma* (Förster) det. Berra 28.VIII.89 // Holotypus ♀ Holotypus *Chrysis lamprosoma* Förster // M. Berra 28.VIII.1989 M. Berra // id nr. 135075 HNHM Hym. coll..

Remarks. Kimsey & Bohart (1991) gave Berlin as type repository. We searched for this type without success. As for other cases, Förster (1853) sent the examined specimens back to Frivaldszky.

Current status. *Spinolia lamprosoma* (Förster, 1853) (transferred by Dahlbom 1854, as *S. magnifica* [= *S. lamprosoma*]).

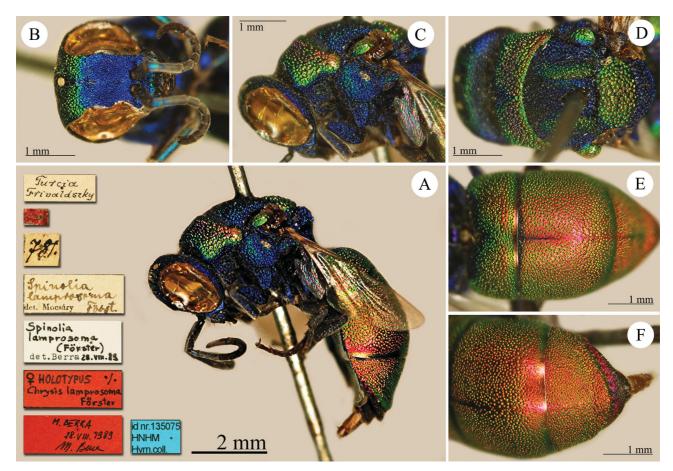


PLATE 34. *Chrysis lamprosoma* Förster, 1853, holotype ♀. **A.** Habitus, lateral view; **B.** Head, frontal view; **C.** Head and mesosoma, lateral view; **D.** Mesosoma, dorsal view; **E.** Metasoma, dorsal view; **F.** T2 and T3 dorso-lateral view.

Chrysis lanata Mocsáry, 1912

(Plate 35A-35F)

Chrysis (Tetrachrysis) lanata Mocsáry 1912a: 405.

Type locality. North Alai: "Transcaspia: Ispayran (Mus. Hung.)".

Holotype, $\[\]$ [not $\[\]$]: Transcaspia Ispayran // *lanata* Mocs. typ. det. Mocsáry // red label // Holotypus *Chrysis lanata* Mocs. $\[\]$ RMB // id nr. 135306 HNHM Hym. coll..

Remarks. Holotype male and not female, as given in the original description. *Chrysis lanata* Mocsáry, 1912 belongs to the *facialis* species-group and not to the *ignita* species-group, for general habitus, dentate mandible,

shape of head in frontal view with subparallel malar space, elongate flagellomeres, and shape of teeth on T3. It is closely related to *Ch. regalis* Mocsáry, from which it is separated by having uniform dark blue body colour; black spots on S2 covering almost 2/3 of the segment; setae erected on mid- and hindtibiae; blunt apical teeth; divergent lateral teeth, whereas *Ch. regalis* has a colour pattern green and blue, has longer black spots on S2, elongate and almost reaching the posterior margin of the sternite; adpressed setae on tibiae; sharp teeth and convergent lateral teeth".

Current status. Chrysis lanata Mocsáry, 1912.

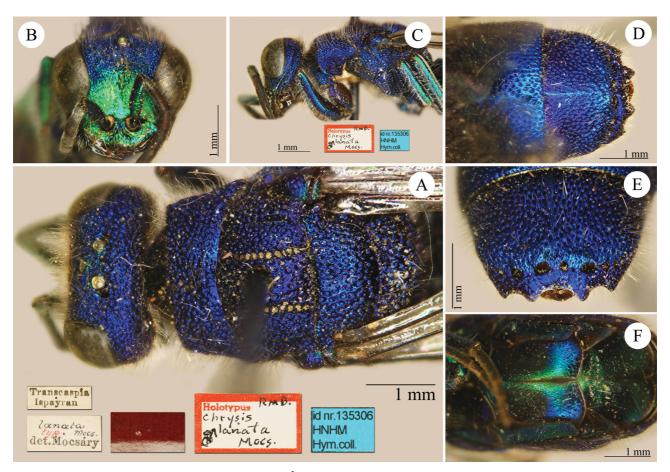


PLATE 35. *Chrysis lanata* Mocsáry, 1912, holotype &. A. Head and mesosoma, dorsal view; B. Head, frontal view; C. Head and mesosoma, lateral view; D. T2 and T3, dorsal view; E. T3, posterior view; F. Metasoma, ventral view.

Chrysis lazulina Förster, 1853

Chrysis lazulina Förster 1853: 315.

Type locality. Hungary: "Aus Ungarn. Eine Entdeckung des Herrn Dr. Frivaldszky".

Holotype, \cite{Q} : Hungar. central. // 801 // Chrysis unicolor Dhlb. det. Mocsáry // Spinolia unicolor Dhlb det. Móczár // Sp. unicolor \cite{Q} .

Current status. Spinolia unicolor Dahlbom, 1831 (synonymised and transferred by du Buysson 1896).

Chrysis leachii cortii Linsenmaier, 1951

Chrysis (Chrysogona) leachii var. cortii Linsenmaier 1951: 50.

Type locality. Switzerland: "Wallis, Genf".

Syntype, 12: Simplon 1000m 8.45 Linsenmaier // *Chrysis* L. *Leachii* Sh. var. *Cortii* Lins. // *Chrysis* var. *corti* Linsm. det. Móczár 962 // id nr. 115603 HNHM Hym. coll..

Current status. Chrysis cortii Linsenmaier, 1951 was raised at species rank by Linsenmaier (1959a).

Chrysis lepida Mocsáry, 1889

(Plate 36A-36F)

Chrysis (Olochrysis) lepida Mocsáry 1889: 278.

Type locality. Armenia: "Caucasus (Coll. Rad.!, Erivan, Mus. Hung.)".

Lectotype, ♀: Kaukasus Erivan // *lepida* Mocs. typ. det. Mocsáry // red label // Holotypus *Chrysis lepida* ♀ Mocs. RM Bohart // id nr. 135152 HNHM Hym. coll..

Remarks. Bohart (in Bohart & French 1986) designated the lectotype. Later, Kimsey & Bohart (1991: 432) considered doubtfully the holotype deposited at ISEA-PAN. In the Radoszkowski collection at ISEA-PAN there is a paralectotype (Rosa *et al.* 2015e).

Current status. Chrysis lepida Mocsáry, 1889.

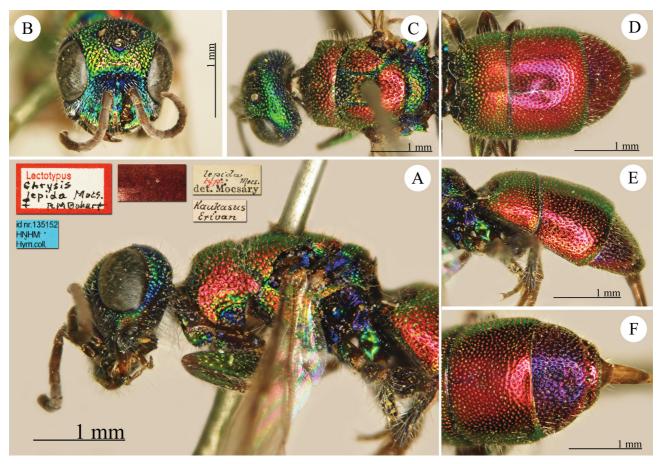


PLATE 36. *Chrysis lepida* Mocsáry, 1889, lectotype ♀. **A.** Head and mesosoma, lateral view; **B.** Head, frontal view; **C.** Head and mesosoma, dorsal view; **D.** Metasoma, dorsal view; **E.** Metasoma, lateral view; **F.** T2 and T3, posterior view.

Chrysis longipilis Mocsáry, 1911

(Plate 37A-37D)

Chrysis (Holochrysis) longipilis Mocsáry 1911b: 467.

Type locality. Uzbekistan: "Turkestania: Samarkand (Mus. Hung.)".

Holotype. \circlearrowleft : Turkestania Samarkand // *longipilis* Mocs. typ. det. Mocsáry // red label // Holotypus \circlearrowleft *Chrysis longipilis* Mocsáry // id nr. 135115 HNHM Hym. coll..

Current status. Chrysura longipilis (Mocsáry, 1911) (transferred by Kimsey & Bohart 1991).

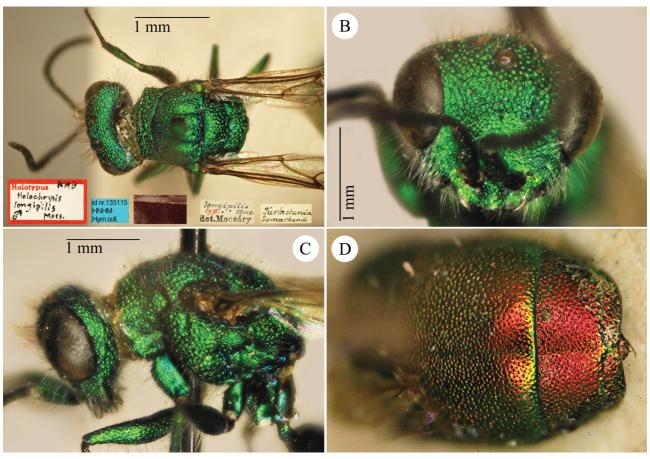


PLATE 37. *Chrysis longipilis* Mocsáry, 1911, holotype ♂. **A**. Head and mesosoma, dorsal view; **B**. Head, frontal view; **C**. Head and mesosoma, lateral view; **D**. T2 and T3, posterior view.

Chrysis longispina Mocsáry, 1912 (Plate 38A–38F)

Chrysis (Trichrysis) longispina Mocsáry 1912a: 377.

Type locality. Yemen: "Arabia: Lahej; e collectione non pridem defuncti egregii viri G. T. Bingham, nunc Musei Nationalis Hungarici propria (Mus. Hung.)".

Holotype, ♀: Arabia Lahej // Lahej Arabia 4.2.95 Jerbury // Collect. Bingham // *longispina* Mocs. typ. det. Mocsáry // red label // Holotypus *Chrysis longispina* Mocs. ♀ RM Bohart // id nr. 135541 HNHM Hym. coll..

Current status. Trichrysis longispina (Mocsáry, 1912) (transferred by Kimsey & Bohart 1991).

Chrysis lydiae Mocsáry, 1889

(Plate 39A-39F)

Chrysis (Olochrysis) Lydiae Mocsáry 1889: 268.

Type locality. Turkey: "Asia minor (Brussa [= Bursa], Mus. Hung.)".

Holotype, &: 625-35 // Brussa // Holotypus Chrysis Lydiae Mocsáry // id nr. 135638 HNHM Hym. coll..

Remarks. Chrysura lydiae Mocsáry belongs to the dichroa species-group. Arens (2001) revised the species of dichroa species-group in the Peloponnese, including C. lydiae and providing several pictures and descriptions useful also for the western Turkish fauna.

Current status. Chrysura lydiae (Mocsáry, 1889) (transferred by Kimsey & Bohart 1991).

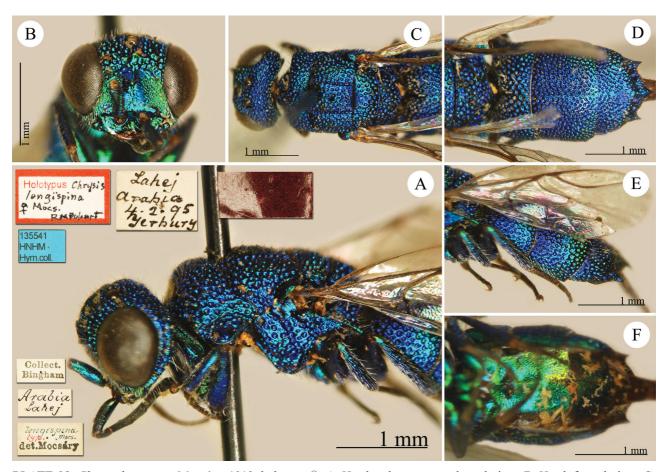


PLATE 38. *Chrysis longispina* Mocsáry, 1912, holotype ♀. **A**. Head and mesosoma, lateral view; **B**. Head, frontal view; **C**. Head and mesosoma, dorsal view; **D**. Metasoma, dorsal view; **E**. Metasoma, lateral view; **F**. Metasoma, ventral view.

Chrysis mariae du Buysson, 1887

Chrysis Mariae du Buysson 1887: 193.

Type locality. Israel: "14 \circlearrowleft capturés Tibériade (Syrie) par M. Abeille de Perrin.

Paralectotype, 1 \circlearrowleft : TBD [Tiberiade] // 3
brown label> // mariae // Chr. Taczanovsky Rad. det. Mocsáry // id nr. 115618 HNHM Hym. coll..

Remarks. Rosa (2009: 243) designated the lectotype deposited at MSNG.

Current status. Chrysis taczanovskii Radoszkowski, 1876 (synonymised by Mocsáry 1889).

Chrysis millenaris Mocsáry, 1897

(Plate 40A-40F)

Chrysis (Holochrysis) millenaris Mocsáry 1897: 645

Type locality. Bulgaria and Hungary: "Hungaria (Budapest, Makó, Peér) et Bulgaria, specimen a Dom. Stipanicus inventum (Mus. Hung.)".

Lectotype, ♀: Martonh. Stipanics // Budapest <handwritten by Móczár> // Lectotypus ♀ *Chr.* (*Holo-*) *millenaris* Mocsáry // id nr. 135147 HNHM Hym. coll..

Paralectotypes: 1♀: Makó Fodor // Paralectotypus ♀ *Chr.* (*Holo-*) *millenaris* Mocsáry // id nr. 135148 HNHM Hym. coll.; 1♂: Bulgaria Stipanits // Paralectotypus ♀ *Chr.* (*Holo-*) *millenaris* Mocsáry // id nr. 135149 HNHM Hym. coll.; 1♂: Peér // Paralectotypus ♀ *Chr.* (*Holo-*) *millenaris* Mocsáry // id nr. 135150 HNHM Hym. coll..

Remarks. Móczár (1965: 166) designated the lectotype.

Current status. Chrysis millenaris Mocsáry, 1897.

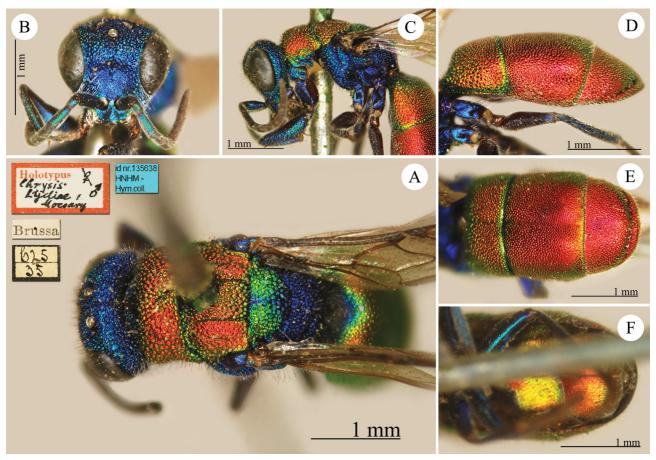


PLATE 39. *Chrysis lydiae* Mocsáry, 1889, holotype 3. **A.** Head and mesosoma, dorsal view; **B.** Head, frontal view; **C.** Head, mesosoma and T1, lateral view; **D.** Metasoma, lateral view; **E.** Metasoma, dorsal view; **F.** Metasoma, ventral view.

Chrysis minuta Mocsáry, 1909 (Plate 41A–41D)

Chrysis (Tetrachrysis) minuta Mocsáry 1909: 3, nom. praeocc. nec Mocsáry, 1889.

Chrysis mina Bohart in Kimsey & Bohart 1991: 439. Replacement name for Chrysis minuta Mocsáry 1909 nec Mocsáry 1889.

Type locality. Kazakhstan: "Baigakum, penes Djulek 3.VI.1907. Specimen unicum".

Holotype, \circlearrowleft : Baigakum bei Djulek Turkest. L. Wollmann / 3.VI.1907 // *minuta* Mocs. typ. det. Mocsáry // red label // Holotypus *Chrysis minuta* Mocs. \circlearrowleft RM Bohart // id nr. 135305 HNHM Hym. coll..

Remarks. Kimsey & Bohart (1991) placed *Chrysis minuta* Mocsáry, 1909 in the *maculicornis* species-group. Nevertheless, this species belongs to the *varidens* species-group because of the elongated F1, three times as long as wide, the general habitus and colouration, it is similar to *Ch. taurica* Mocsáry as observed by Mocsáry (1909).

Current status. Chrysis mina Bohart in Kimsey & Bohart, 1991.

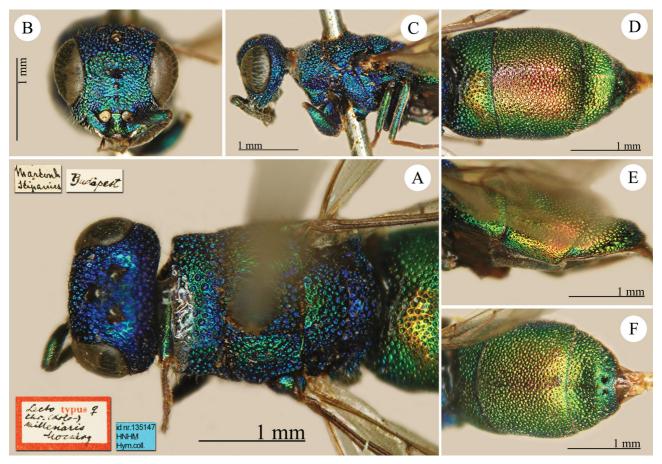


PLATE 40. *Chrysis millenaris* Mocsáry, 1897, lectotype ♀. **A**. Head and mesosoma, dorsal view; **B**. Head, frontal view; **C**. Head and mesosoma, lateral view; **D**. Metasoma, dorsal view; **E**. Metasoma, lateral view; **F**. Metasoma, posterior view.

Chrysis monochroma Mocsáry, 1893

Chrysis (Tetrachrysis) monochroma Mocsáry 1893: 221.

Type locality. Greece: "Graecia (Mons Parnassus, a CI. Dom. Th. Krüper detecta) (Musaeum Nationale Hungaricum)".

Holotype, ♂: Graecia Krüper // Holotypus ♂ *Chr.* (*Tetra-*) *monochroma* Mocsáry // id nr. 135230 HNHM Hym. coll..

Current status. Chrysis ragusae De Stefani, 1888 (synonymised by Trautmann 1927).

Chrysis mongolica Mocsáry, 1914

Chrysis (Trichrysis) mongolica Mocsáry 1914: 24.

Type locality. China and Mongolia: "China et Mongolia, septem specimina conformia (Mus. Hung.)".

Lectotype, ♀: Mongolia // *mongolica* Mocs. typ. det. Mocsáry // red label // *Chrysis* L. *pellucida* Buyss. Linsenmaier det. 59 // Lectotypus *Chrysis mongolica* Mocs. ♀ RM Bohart // id nr. 135554 HNHM Hym. coll..

Paralectotypes: 4♀♀: Mongolia // *mongolica* Mocs. typ. det. Mocsáry // red label // *Chrysis* L. *pellucida* Buyss. Linsenmaier det. 59 // Paralectotypus *Chrysis mongolica* Mocs. ♀ RM Bohart // id nr. 135555-135558 HNHM Hym. coll..

Remarks. Bohart (in Bohart & French 1986) designated the lectotype.

Current status. *Trichrysis pellucida* (du Buysson, 1887) (synonymised by Linsenmaier 1959a, and transferred by Kimsey & Bohart 1991).

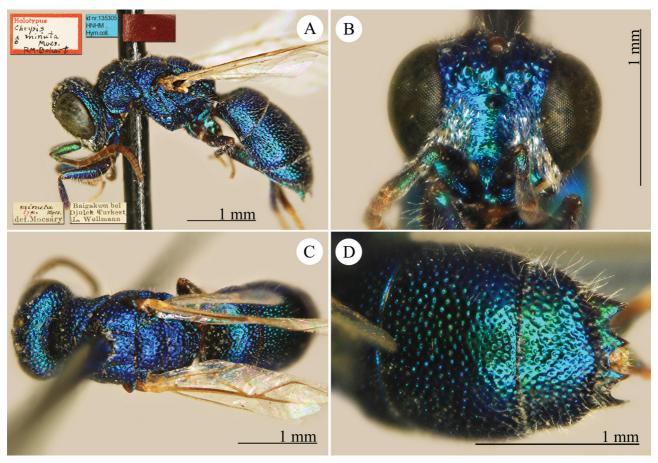


PLATE 41. *Chrysis minuta* Mocsáry, 1909, holotype 3. **A**. Habitus, lateral view; **B**. Head, frontal view; **C**. Habitus, dorsal view; **D**. T2 and T3, posterior view.

Chrysis montivaga Mocsáry, 1912

(Plate 42A-42F)

Chrysis (Tetrachrysis) montivaga Mocsáry 1912a: 409.

Type locality. Kyrgyzstan: "Turkestania: Montes Alexandri (Mus. Hung.)".

Lectotype, ♂: Turkestan Mt. Alexander // *montivaga* Mocs. typ. det. Mocsáry // red label // Lectotypus ♂ *Chrysis montivaga* Mocs. ♀ RMB // id nr. 135309 HNHM Hym. coll..

Paralectotypes: 3♂♂: Turkestan Mt. Alexander // montivaga Mocs. typ. det. Mocsáry // red label // Paralectotypus ♂ *Chrysis montivaga* Mocs. ♀ RMB // id nr. 135310, 1353111, 135312 HNHM Hym. coll..

Remarks. Bohart (in Bohart & French 1986) designated the lectotype.

Current status. Chrysis montivaga Mocsáry, 1912.

Chrysis morawitzi Mocsáry, 1889

(Plate 43A-43F)

Chrysis (Spinolia) Morawitzi Mocsáry 1889: 607.

Type locality. Turkmenistan: Territorium Maris Caspii (Krasnowodsk [= Türkmenba°y], Mus. Hung.).

Holotype, ♂: Kraznowods (!) Morawitz // *Morawitzi* Mocs. typ. det. Mocsáry // Holotypus ♂ *Chrysis morawitzi* Mocsáry // 14.III.1989 Berra vidit // id nr. 135074 HNHM Hym. coll..

Current status. Spinolia morawitzi (Mocsáry, 1889) (transferred by du Buysson 1893).

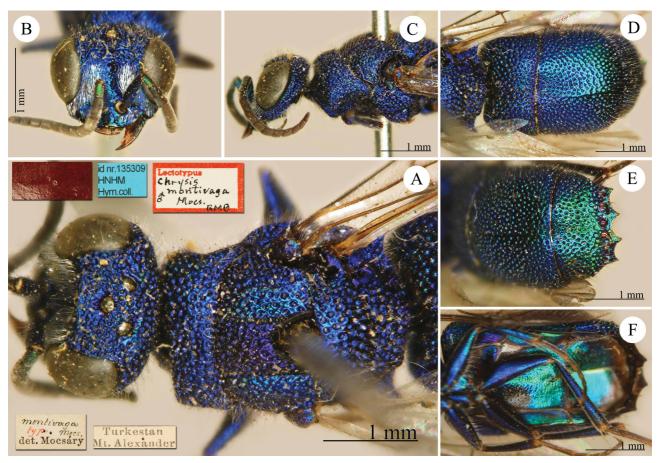


PLATE 42. *Chrysis montivaga* Mocsáry, 1912, lectotype &. **A.** Head and mesosoma, dorsal view; **B.** Head, frontal view; **C.** Head and mesosoma, lateral view; **D.** Metasoma, dorsal view; **E.** T2 and T3, posterior view; **F.** Metasoma, ventral view.

Chrysis mutincisa Linsenmaier, 1968

Chrysis (Chrysis) mutincisa Linsenmaier 1968: 86.

Type locality. Turkey: "Klein-Asien, Mut, VI.65 und 66, leg. Gusenleitner, Schmidt und Schwarz, \Diamond Type, \Diamond Allotype und Paratypen in Coll. m., Paratypen in Coll. Gusenleitner, Schmidt und Schwarz.

Paratypes, 1♀: Mut Asiat. Türk. 10.VI.1965 leg. Jos. Schmidt // ex. Coll. Schmidt // *Chr. mutincisa* Linsenm. det. Linsm. // typus // id nr. 135159 HNHM Hym. coll.; 1♂: Mut Asiat. Türk. 9.VI.1965 leg. Jos. Schmidt // ex. Coll. Schmidt // *Chr. mutincisa* Linsenm. det. Linsm. // typus // id nr. 135159 HNHM Hym. coll..

Current status. Chrysis mutincisa Linsenmaier, 1968.

Chrysis nitidularia Mocsáry, 1912

(Plate 44A-44F)

Chrysis (Tetrachrysis) nitidularia Mocsáry 1912a: 411.

Type locality. Kazakhstan: "*Turkestania: Wernyi; Narynkol, legit Georgius Almasy hungarus, in sua expeditione*". **Lectotype,** ♂: Turkestan Wernyi // *nitidularia* Mocs. typ. det. Mocsáry // red label / Lectotypus *Chrysis nitidularia* Mocs. ♂ RM Bohart // id nr. 135220 HNHM Hym. coll..

Paralectotypes: 1♀: Turkestan Wernyi // nitidularia Mocs. typ. det. Mocsáry // red label // Paralectotypus Chrysis nitidularia Mocs. ♀ RM Bohart // id nr. 135221 HNHM Hym. coll.; 7♀♀: Turkestan Wernyi / nitidularia Mocs. typ. det. Mocsáry // red label // id nr. 135222, 135223, 135224, 135225, 135227, 135228, 135229 HNHM Hym. coll.; 1♀: Turkestan Almásy 1906 // Narynkol // Tekke // nitidularia Mocs. typ. det. Mocsáry // red label // id nr. 135226 HNHM Hym. coll..

Remarks. Bohart (in Bohart & French 1986) designated the lectotype.

Current status. Chrysis fouqueti du Buysson, 1908 (synonymised by Kimsey & Bohart 1991).

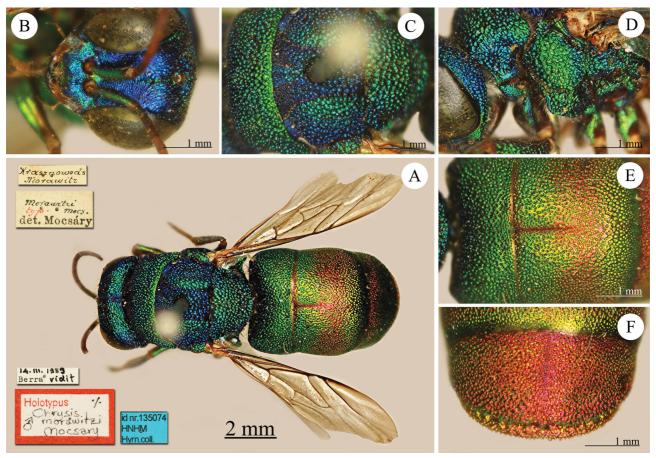


PLATE 43. *Chrysis morawitzi* Mocsáry, 1889, holotype 3. **A**. Habitus, dorsal view; **B**. Head, frontal view; **C**. Mesosoma, dorsal view; **D**. Pronotum and mesopleuron, lateral view; **E**. T1 and T2, dorsal view; **F**. T3, posterior view.

Chrysis occulta Mader, 1939

Chrysis (Pentachrysis) occulta Mader 1939: 39.

Type locality. Italy: "Lombardia (Lacus Como)".

Holotype, ♀: Lombardia Lacus Como // *megerlei* Dhlb. det. Mocsáry // Holotypus *occulta* m. <red label> // *Pentachrysis occulta* n. sp. Mad. // Coll. Mus. Nat. Hung. // *Chrysis* L. *lusca* Fabr. ♀ det. Linsenmaier // id nr. 115669 HNHM Hym. coll..

Remarks. This species was accidentally introduced in Italy by commerce (Linsenmaier 1959a; Rosa *et al.* 2016). It occurs in the Oriental Region, East Palaearctic Region and African islands in the Indian Ocean (e.g. Mauritius). Further discussions on this species can be found in Rosa *et al.* (2016).

Current status. *Trichrysis lusca* (Fabricius, 1804) (synonymised by Linsenmaier 1959a, and transferred by Rosa *et al.* 2014).

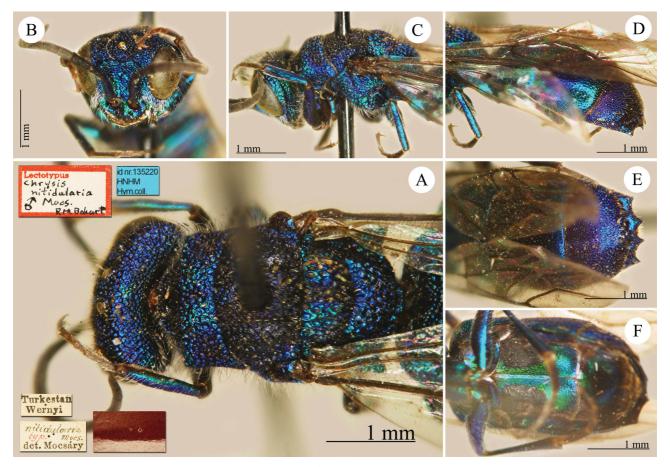


PLATE 44. *Chrysis nitidularia* Mocsáry, 1912, lectotype &. **A.** Head and mesosoma, dorsal view; **B.** Head, frontal view; **C.** Head and mesosoma, lateral view; **D.** Metasoma, lateral view; **E.** T2 and T3, dorsal view; **F.** Metasoma, ventral view.

Chrysis ottomana Mocsáry, 1889

(Plate 45A–45F)

Chrysis (Olochrysis) ottomana Mocsáry 1889: 239.

Type locality. Turkey: "Asia minor (Malatia [= Malatya] in Mesopotamia, Mus. Hung.)".

Holotype, 3:746-46 // Malatia // *ottomana* Mocs. typ. det. Mocsáry // red label // Holotypus *Chrysis ottomana* 3 Mocs. RMB // id nr. 135640 HNHM Hym. coll..

Current status. Chrysura ottomana (Mocsáry, 1889) (transferred by Kimsey & Bohart 1991).

Chrysis paveli Mocsáry, 1897

Chrysis (Tetrachrysis) Páveli Mocsáry 1897: 645.

Type locality. Serbia: "Hungaria meridionalis: Vrdnik. A. Joanne Pavel, Musaei Nationalis Hungarici collectore in uno mare et femina detecta. (Mus. Hung.)".

Lectotype, ♀: Vrdnik Pável // Lectotype ♀ *Chr.* (*Tetra-*) *Páveli* Mocsáry // *Chrysis ragusae* Destef. det. Móczár 962 // id nr. 135099 HNHM Hym. coll..

Paralectotype, 1♀: Vrdnik Pável // Paralectotype ♀ *Chr.* (*Tetra-*) *Páveli* Mocsáry // *Chrysis ragusae* Destef. det. Móczár 962 // id nr. 135100 HNHM Hym. coll..

Remarks. Móczár (1965) designated the lectotype. Both specimens are females, one has the ovipositor completely exserted, the other specimen has the ovipositor retracted in the metasoma.

Current status. Chrysis ragusae De Stefani, 1888 (synonymised by Trautmann 1927).

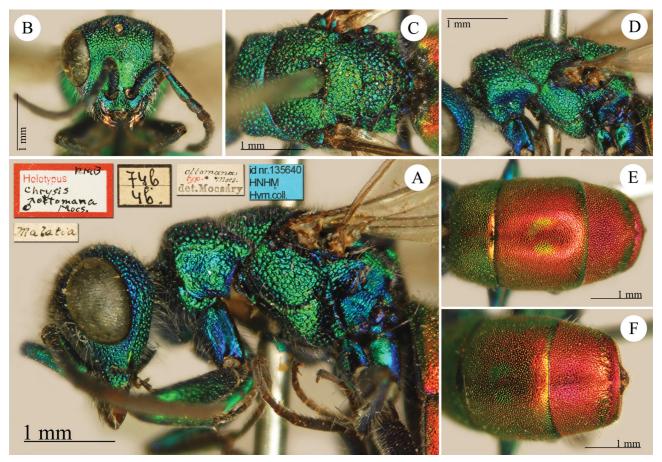


PLATE 45. *Chrysis ottomana* Mocsáry, 1889, holotype 3. A. Head and mesosoma, lateral view; B. Head, frontal view; C. Mesosoma, dorsal view; D. Mesosoma, lateral view; E. Metasoma, dorsal view; F. T2 and T3, posterior view.

Chrysis perezi Mocsáry, 1889

(Plate 46A-46F)

Chrysis (Tetrachrysis) Pérezi Mocsáry 1889: 461.

Type locality. Algeria: "Algeria (Bône); a Clariss. Domino J. Pérez, Professore Burdigalensi, mecum benevole communicata et in eius honorem denominata".

Lectotype, \circlearrowleft : Algeria Boné // v. *Pérezi* Mocs. typ. det. Mocsáry // red label // Lectotypus *Chrysis perezi* \circlearrowleft Mocs. RMB // id nr. 135385 HNHM Hym. coll..

Remarks. Bohart (in Bohart & French 1986) designated the lectotype.

Current status. Chrysis perezi Mocsáry, 1889.

Chrysis placida Mocsáry, 1879

(Plate 47A-47F)

Chrysis (Tetrachrysis) placida Mocsáry 1879a: 122.

Type locality. Hungary: "In Hungaria centrali inventa est".

Holotype, ♂: Buda // Holotype *Chr.* (*Tetra-*) ♂ *placida* Mocsáry // 134122 HNHM Hym. coll. // pinned with cocoon.

Remarks. Kimsey & Bohart (1991) placed Chrysis placida Mocsáry, 1879 in synonymy of Ch. inaequalis

Dahlbom, 1845; at a later time, it was revalidated by Tyrner (2007). The two species are clearly distinct as illustrated by Linsenmaier (1959a).

Current status. Chrysis placida Mocsáry, 1879.

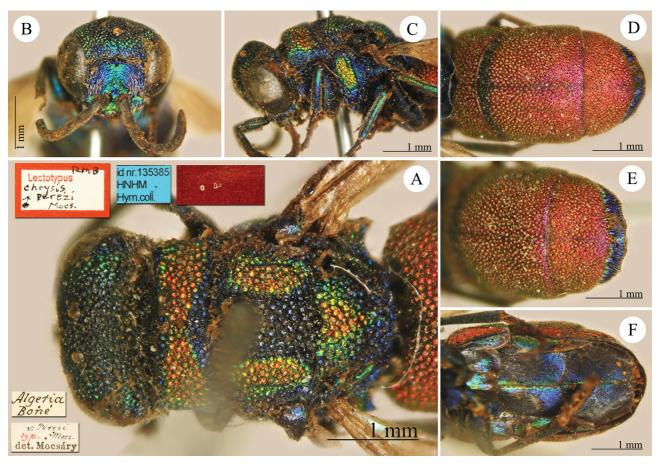


PLATE 46. *Chrysis perezi* Mocsáry, 1889, lectotype 3. A. Head and mesosoma, dorsal view; **B.** Head, frontal view; **C.** Head and mesosoma, lateral view; **D.** Metasoma, dorsal view; **E.** T2 and T3, dorsal view; **F.** Metasoma, ventral view.

Chrysis porphyrea Mocsáry, 1889

Chrysis (Olochrysis) porphyrea Mocsáry 1889: 284.

Type locality. Greece, Turkey: "Graecia (Cumani in peninsula Morea (Mus. Hung.); Asia minor (Smyrna [= Izmir], Mus. Hung.)".

Lectotype, ♀: 660-41 // Morea Cumani Brenske // *porphyrea* Mocs. typ. det. Mocsáry // red label // Lectotypus *Chrysis porphyrea* Mocs. ♀ RM Bohart // id nr. 135637 HNHM Hym. coll..

Remarks. Bohart (in Bohart & French 1986) designated the lectotype. *Ch. porphyrea* Mocsáry, 1889 is considered as the eastern subspecies of *Ch. oraniensis* (Lucas, 1849) by Trautmann (1927) and Linsenmaier (1959a, 1968).

Current status. Chrysura oraniensis porphyrea (Mocsáry, 1889) (transferred by Kimsey & Bohart 1991).

Chrysis regalis Mocsáry, 1912

(Plates 48A-48F, 49A-49D)

Chrysis (Tetrachrysis) regalis Mocsáry 1912a: 408.

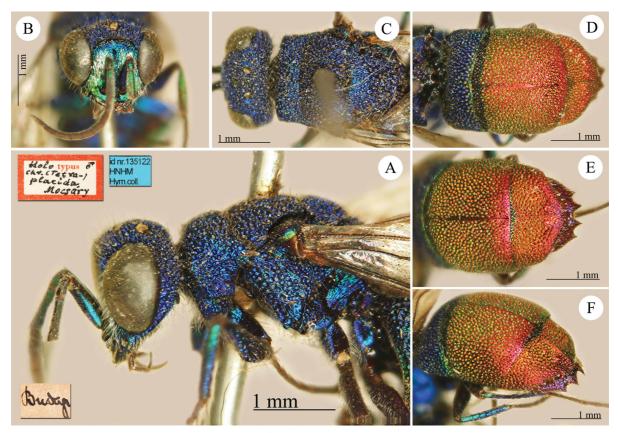


PLATE 47. *Chrysis placida* Mocsáry, 1879, holotype ♂. **A**. Head and mesosoma, lateral view; **B**. Head, frontal view; **C**. Head and mesosoma, dorsal view; **D**. Metasoma, dorsal view; **E**. T2 and T3, dorsal view; **F**. Metasoma, latero-dorsal view.

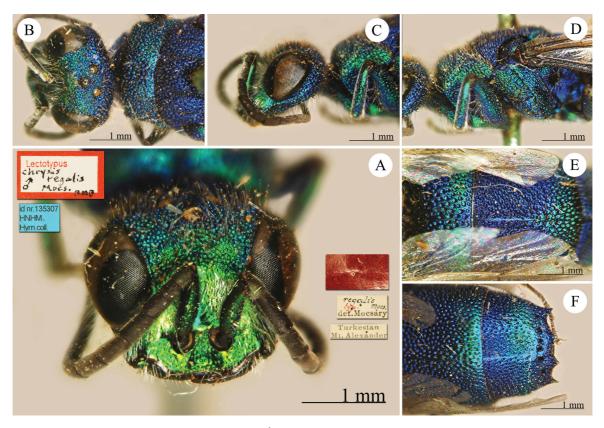


PLATE 48. *Chrysis regalis* Mocsáry, 1912, lectotype ♂. **A.** Head, frontal view; **B.** Head and pronotum, dorsal view; **C.** Head and pronotum, lateral view; **D.** Mesosoma, lateral view; **E.** T1 and T2, dorsal view; **F.** T2 and T3, posterior view.



PLATE 49. *Chrysis regalis* Mocsáry, 1912, paralectotype ♀. **A.** Habitus, dorsal view; **B.** Head, frontal view; **C.** Head and mesosoma, lateral view; **D.** T3, posterior view.

Type locality. Kyrgyzstan: "Turkestania: Montes Alexandri (Mus. Hung.)".

Lectotype, \circlearrowleft : Turkestan Mt. Alexander // *regalis* Mocs. typ. det. Mocsáry // red label // Lectotypus *Chrysis regalis* Mocs. \circlearrowleft RMB // id nr. 135307 HNHM Hym. coll..

Paralectotype, 1 \updownarrow : Turkestan Mt. Alexander // *regalis* Mocs. typ. det. Mocsáry // red label // Paralectotypus *Chrysis regalis* Mocs. \updownarrow RMB // id nr. 135308 HNHM Hym. coll..

Remarks. Bohart (in Bohart & French 1986) designated the lectotype. Kimsey & Bohart (1991) included *Chrysis regalis* Mocsáry, 1912 in the *Ch. ignita* species-group, followed by Tarbinsky (2000). Nevertheless, *Ch. regalis* belongs to the *facialis* species-group based on its general habitus, elongate and subparallel malar spaces in both sexes and different shape of apical teeth on T3.

Current status. Chrysis regalis Mocsáry, 1912.

Chrysis regina du Buysson, 1887

Chrysis Regina du Buysson 1887: 186.

Type locality. "Perse".

Possible paralectotype, 1♂: Persia Demabend // *Regina* Ab. et Buyss. ♂ // *Chrysis regina* Buyss. det. Mocsáry // id nr. 115626 HNHM Hym. coll..

Remarks. Bohart (in Kimsey & Bohart 1991: 456) designated the lectotype deposited at MNHN.

Current status. Chrysis regina du Buysson, 1887.

Chrysis robusta Mocsáry, 1909

(Plate 50A-50F)

Chrysis (Euchroeus) robusta Mocsáry 1909: 7.

Type locality. Kazakhstan: "Montes Karatau, penes Djulek, 19.V.1908. Specimen unicum".

Holotype, ♂: Karataugebirge bei Djulek Turk. L. Wollmann / 19.V.1908 // *robusta* Mocs. typ. det. Mocsáry // Holotypus *Chrysis robusta* Mocsary LSK // id nr. 135674 HNHM Hym. coll..

Current status. Euchroeus robustus (Mocsáry, 1909) (transferred by Bischoff 1913).

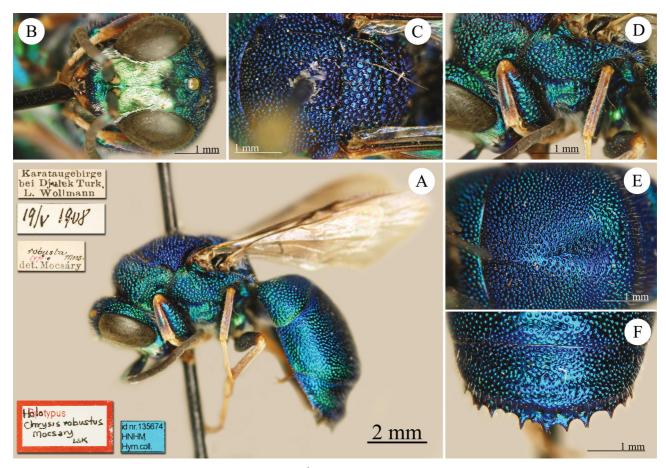


PLATE 50. *Chrysis robusta* Mocsáry, 1909, holotype, ♂. **A**. Habitus, lateral view; **B**. Head, frontal view; **C**. Mesoscutum, mesoscutellum and metanotum, dorsal view; **D**. Pronotum and mesopleuron, lateral view; **E**. T2, dorsal view; **F**. T3, posterior view.

Chrysis rogenhoferi Mocsáry, 1889

(Plate 51A-51F)

Chrysis (Spinolia) rogenhoferi Mocsáry 1889: 604.

Type locality. Greece: "Graecia (Attica, Mus. Caes. Vindob.)".

Holotype, \supseteq : Attica Krüper // Spinolia Rogenhoferi det. Mocsáry // Holotypus \supseteq Chrysis rogenhoferi Mocsáry // id nr. 135073 HNHM Hym. coll..

Remarks. Even if the type depository given by Mocsáry (1889) is Vienna (NHMW), the holotype is housed in HNHM. In the general collection in NHMW there is one specimen labelled as type of *S. rogenhoferi*: [*Graecia*] <handwritten by Mocsáry> [*Spin. rogenhoferi Mocs. det. Trautmann*] [*Holotypus Chrysis (Spin.) Rogenhoferi Mocsáry*] <handwritten by Móczár> [No type det. P. Rosa 2010]. Móczár (1964a: 447) examined the specimen and

considered it as holotype. Nevertheless, this specimen does not match the original description. In fact, according to Mocsáry (1889: 605) *Ch. rogenhoferi* should be strictly related to *Spinolia dournovi* (Radoszkowski, 1877): "Species quad colorem cum Chryside Dournovi Rad. multum habet similitudinis", with "vertice, pro- et mesonoto, scutello, postscutello, tegulis et abdominis segmentis dorsalibus cupreo-auratis, mesopleuris supra viridimaculati". The specimen pinned with the labels is a female of *Spinolia lamprosoma* (Förster, 1853) and cannot be considered as the holotype of *Ch. rogenhoferi* Mocsáry, 1889. The specimen in HNHM matches the original description and type locality, therefore we consider it as the type.

Current status. Spinolia rogenhoferi (Mocsáry, 1889) (transferred by du Buysson 1893).

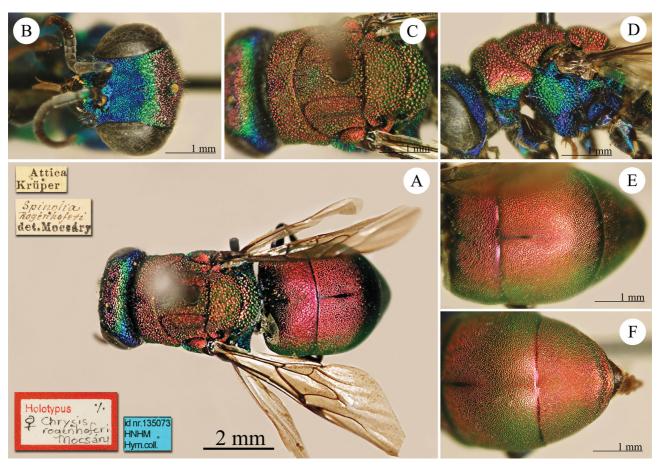


PLATE 51. *Chrysis rogenhoferi* Mocsáry, 1889, holotype ♀. **A**. Habitus, dorsal view; **B**. Head, frontal view; **C**. Head and mesosoma, dorsal view; **D**. Mesosoma, lateral view; **E**. Metasoma, dorsal view; **F**. T2 and T3, posterior view.

Chrysis rubricata du Buysson, 1902

(Plate 52A-52D)

Chrysis (Holochrysis) rubricata du Buysson in Mocsáry 1902a: 340.

Type locality. Egypt: "Aegyptus (Cairo et Assuam, a Dom. D.re O. Schmiedeknecht in floribus Zygophylli coccinei L. collecta) (Mus. Hung.)".

Lectotype, \circlearrowleft : Cairo // Aegyptus Schmkn. 97 // *rubricata* Mocs. typ. det. Mocsáry // red label // Lectotypus \circlearrowleft *Chrysis rubricata* Mocs. RM Bohart // id nr. 135194 HNHM Hym. coll..

Paralectotypes: 1♂: Cairo // Aegyptus Schmkn. 97 // rubricata Mocs. typ. det. Mocsáry // red label // Paralectotypus ♂ *Chrysis rubricata* Mocs. RM Bohart // id nr. 135195 HNHM Hym. coll.; 1♀: Cairo // Aegyptus Schmkn. 97 // zu *Zygophyllum coccineum* L. // rubricata Mocs. typ. det. Mocsáry // red label // Paralectotypus ♀ *Chrysis rubricata* Mocs. // id nr. 135196 HNHM Hym. coll.; 1♀: Cairo // Aegyptus Schmkn. 97 // rubricata Mocs. typ. det. Mocsáry // red label // Paralectotypus ♀ *Chrysis rubricata* Mocs. // id nr. 135197 HNHM Hym. coll.; 1♀:

Cairo // Aegyptus Schmkn. 97 // *Chrysis rubricata* Buyss. n. sp. type! R. du Buysson det. 1901 // *rubricata* Mocs. typ. det. Mocsáry // red label // Paralectotypus \(\text{\$\subrace} \) *Chrysis rubricata* Mocs. // id nr. 135198 HNHM Hym. coll.

Remarks. Bohart (in Bohart & French 1986) designated the lectotype. An additional specimen is housed in MNHN.

Current status. Chrysis rubricata du Buysson, 1902.

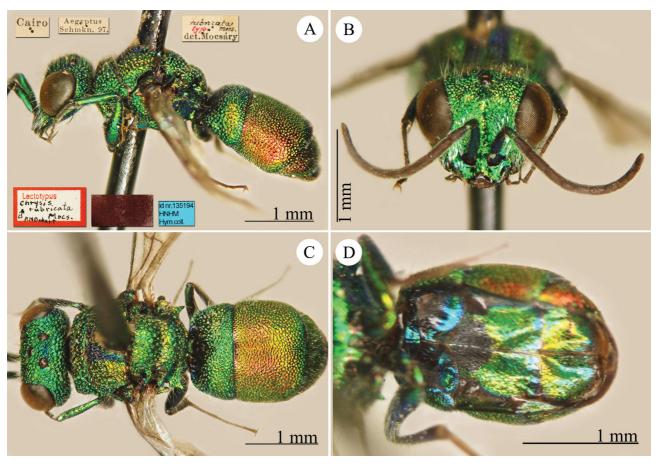


PLATE 52. *Chrysis rubricata* Mocsáry, 1902, lectotype ♂. **A.** Habitus, lateral view; **B.** Head, frontal view; **C.** Habitus, dorsal view; **D.** Metasoma, ventral view.

Chrysis rugulosa Mocsáry, 1909

(Plates 53A–53F, 54A–54F)

Chrysis (Euchroeus) rugulosa Mocsáry 1909: 8.

Type locality. Kazakhstan: "Montes Karatau, penes Djulek 15-19.V.1908. Tres mares et quattuor feminae conformes".

Lectotype, &: Karataugebirge bei Djulek Turk. L. Wollmann / 19.V.1908 // *rugulosa* Mocs. typ. det. Mocsáry // Lectotypus & *Chrysis rugulosa* Mocsáry LS Kimsey '83 // id nr. 135666 HNHM Hym. coll..

Paralectotypes: 2♂♂ and 3♀♀: Karataugebirge bei Djulek Turk. L. Wollmann / 19.V.1908 // *rugulosa* Mocs. typ. det. Mocsáry // Paralectotypus *Chrysis rugulosa* Mocsáry LS Kimsey '83 // id nr. 135667, 135669-135672 HNHM Hym. coll.; 1♀: Karataugebirge bei Djulek Turk. L. Wollmann / 15.V.1908 // *rugulosa* Mocs. typ. det. Mocsáry // Paralectotypus ♀ *Chrysis rugulosa* Mocsáry LS Kimsey '83 // id nr. 135668 HNHM Hym. coll..

Remarks. Kimsey (1986) designated the lectotype. Kimsey (in Kimsey & Bohart 1991) replaced the name *rugulosa* Mocsáry, 1909 with *Brugmoia rugulae* Kimsey. *B. rugulae* Kimsey is an unnecessary replacement name because: (1) there is not homonym; in fact, the name chosen by Abeille de Perrin (1879) is *rugosula* and not *rugulosa*; (2) the name *Ch. rugulosa* was in current use in the literature, whereas *Ch. rugosula* was never used; (3)

only Mocsáry considered *Euchroeus* as a subgenus of *Chrysis*, whereas all the other authors placed *rugulosa* in the genus *Euchroeus* and not in the genus *Chrysis*, therefore the two 'taxa' are not congeneric; (4) Kimsey considered the name *Chrysis rugosula* Abeille de Perrin, 1879 as a valid name; however, *Ch. rugosula* was never described by the French author, who simply thought to describe it, but in the same text refused this idea and identified the specimen as *Ch. angulata*: "Je n'ai de cette espèce qu'un seul δ recu d'Espagne. Encore ne puis je le lui rapporter qu'avec grand doute cause des mots: Thoracis dorsum crassissime punctato-reticulatum, ce qui n'existe nullement sur mon individu. J'avais donc eu l'idée de le décrire sous le nom de Rugosula, mais la forme caractéristique du dernier segment m'enlève le courage de le faire."

Current status. Euchroeus rugulosus (Mocsáry, 1909) (transferred by Bischoff 1913).

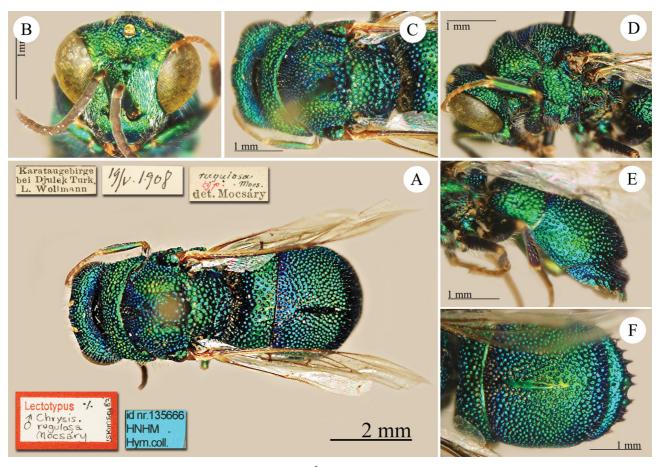


PLATE 53. *Chrysis rugulosa* Mocsáry, 1909, lectotype, &. A. Habitus, dorsal view; B. Head, frontal view; C. Head and mesosoma, dorsal view; D. Head and mesosoma, lateral view; E. Metasoma, lateral view; F. Metasoma, dorsal view.

Chrysis sacrata caucasiaca Linsenmaier, 1987

Chrysis (Cornuchrysis) sacrata caucasiaca Linsenmaier 1987: 155.

Type locality. Azerbaijan: "Caucasus".

Holotype, ♀: Caucasus Elisabethpol [= Ganja] // *Chrysis xanthocera* Klug det. Mocsáry // ♀ Type *Chrysis* L. *Spintharis sacrata* Buyss. v. *caucasica* Linsenmaier det. // id nr. 135397 HNHM Hym. coll..

Current status. Chrysis sacrata caucasiaca Linsenmaier, 1987.

Chrysis secernenda Mocsáry, 1912

Chrysis (Trichrysis) secernenda Mocsáry 1912a: 376

Type locality. Uzbekistan: "Turkestania: Gouldsha (Mus. Hung.)".

Lectotype, ♀: Gouldscha Ferghana 1905 Korb // *secernenda* Mocs. typ. det. Mocsáry // red label // Lectotypus *Chrysis secernenda* Mocs. ♂ (!) RMB // id nr. 135539 HNHM Hym. coll..

Paralectotype, 1[sex unknown]: Gouldscha Ferghana 1905 Korb // secernenda Mocs. typ. det. Mocsáry // red label // Paralectotypus *Chrysis secernenda* Mocs. RMB // id nr. 135540 HNHM Hym. coll..

Remarks. Bohart (in Bohart & French 1986) designated the lectotype. Pictures of the lectotype are in Rosa *et al.* (2014: 114, plate 65).

Current status. Trichrysis secernenda (Mocsáry, 1912) (transferred by Kimsey & Bohart 1991).

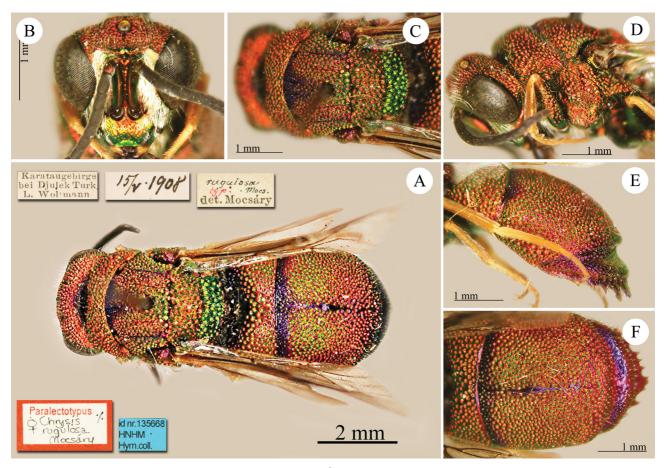


PLATE 54. *Chrysis rugulosa* Mocsáry, 1909, paralectotype, ♀. **A**. Habitus, dorsal view; **B**. Head, frontal view; **C**. Head and mesosoma, dorsal view; **D**. Head and mesosoma, lateral view; **E**. Metasoma, lateral view; **F**. Metasoma, dorsal view.

Chrysis semenovi Mocsáry, 1909

(Plate 55A-55F)

Chrysis (Hexachrysis) Semenovi Mocsáry 1909: 7, nom. praeocc. nec Radoszkowski, 1891. Chrysis mocsariana Semenov 1912: 197. Replacement name for Ch. semenovi Mocsáry 1909 nec Radoszkowski 1891.

Type locality. Kazakhstan: "Montes Karatau, penes Djulek 19.V.1908. Specimen unicum".

Holotype, ♂: Karataugebirge bei Djulek Turk. L. Wollmann / 19.V.1908 // *Semenovi* Mocs. typ. det. Mocsáry / red label // Holotypus *Chrysis semenovi* Mocs. ♂ RMB // id nr. 135411 HNHM Hym. coll..

Remarks. Chrysis mocsariana Semenov belongs to the smaragdula species-group (Ch. sexdentata species-group sensu Linsenmaier 1959a).

Current status. Chrysis mocsariana Semenov, 1912.

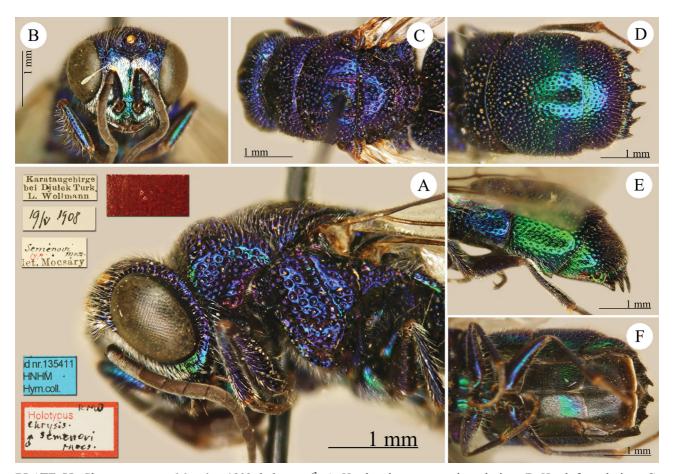


PLATE 55. *Chrysis semenovi* Mocsáry, 1909, holotype 3. A. Head and mesosoma, lateral view; B. Head, frontal view; C. Head and mesosoma, dorsal view; D. Metasoma, dorsal view; E. Metasoma, lateral view; F. Metasoma, ventral view.

Chrysis semiviolacea Mocsáry, 1889

(Plate 56A-56F)

Chrysis (Tetrachrysis) semiviolacea Mocsáry 1889: 484.

Type locality. Algeria: "Algeria (Setif, Coll. Saussurei!; Sebdou. Mus. Hung.)".

Lectotype, ♀: Algeria // 886-6 // *semiviolacea* Mocs. typ. det. Mocsáry // Lectotypus ♀ *Chrysis semiviolacea* Mocs. RMB // id nr. 135172 HNHM Hym. coll..

Remarks. Bohart (in Bohart & French 1986) designated the lectotype.

Current status. Chrysis semiviolacea Mocsáry, 1889.

Chrysis singula Radoszkowski, 1891

Chrysis singula Radoszkowski 1891: 187.

Type locality. Turkmenistan: "Ashabad".

Syntype, 1♀: Ashabad *singula* Rad. n. sp. <handwritings by Radoszkowski and Mocsáry> // *Chrysis grohmanni* v. *singula* Rad. det. Mocsáry // id nr. 115604 HNHM Hym. coll..

Remarks. Another syntype is deposited at Radoszkowski's collection in ISEA-PAN and pictures are in Rosa *et al.* (2015e: 57, plate 39).

Current status. Chrysis singula Radoszkowski, 1891.

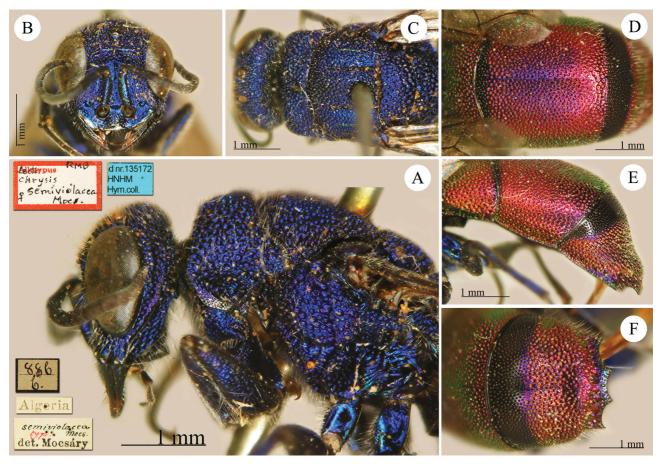


PLATE 56. *Chrysis semiviolacea* Mocsáry, 1889, lectotype ♀. **A.** Head and mesosoma, lateral view; **B.** Head, frontal view; **C.** Head and mesosoma, dorsal view; **D.** Metasoma, dorsal view; **E.** Metasoma, lateral view; **F.** T3, posterior view.

Chrysis splendidula unica Radoszkowski, 1891

Chrysis splendidula var. unica Radoszkowski 1891: 189.

Type locality. Turkmenistan: "Ashabad".

Syntype, 1♀: Trans-Kaspia / *splendidula* var. *unica* <handwritten by Radoszkowski> / *Chrysis splendidula* v. *unica* Rad. det. Mocsáry / id nr. 115606 HNHM Hym. coll..

Remarks. As in other cases observed in Radoszkowski's collection, species described in 1891 bear the label "Trans-Caspia" and not "Ashabad" (e.g. *Ch. nova, Ch. simulatrix*, etc.). Other three syntypes are housed in the Radoszkowski collection in ISEA-PAN (Rosa *et al.* 2015e).

Current status. Chrysis splendidula Rossi, 1790 (synonymised by Kimsey & Bohart 1991).

Chrysis succincta transsylvanica Zilahi-Kiss, 1927

Chrysis succincta var. transsylvanica Zilahi-Kiss 1927: 19.

Type locality. Romania: "Transylvania".

Holotype, ♂: Szászkézd Silbernagel // Typus // Chrysis succincta var. transylvanica Kiss // Holotypus ♂ Chr. succ. var. transylvanica Zilahi-Kiss // Chrysis albanica Tr. det. Móczár 962 // id nr. 135098 HNHM Hym. coll..

Current status. Chrysis albanica Trautmann, 1926 (synonymised by Móczár 1965).

Chrysis sybarita jaxartis Semenov, 1910

Chrysis sybarita var. jaxartis Semenov 1910: 222.

Type locality. Kazakhstan: "Turkestan occid.: prov. Syr-darjensis: Dzhulek ad fl. Syr-darja (Jaxartem) (J. Baeckmann 22.V.1905).—5 specimina (5 ♂), inter se prorsus consentanea (coll. Semenov-Tian-Shansky)".

Syntype, 1 &: [Djulek 22.V.05 J. Bekmann] [in Russian] // *Chrysis sybarita jaxartis* m. typ. & A. Semenov-Tian-Shansky det. VIII.09 // *Chrysis sybarita* v. *jaxartis* Sem. det. Mocsáry // Paratypus & *Chrysis sybarita jaxartis* Semenov // id nr. 115620 HNHM Hym. coll..

Remarks. Semenov (1910) described *Ch. jaxartis* based on five syntype specimens. Kimsey & Bohart (1991) listed the holotype at ZISP, however this specimen cannot be considered as the lectotype by inference of "holotype according to the Code (ICZN 1999: Article 74.5).

Current status. Chrysis jaxartis Semenov-Tian-Shanskij, 1910 was raised at species rank by Linsenmaier (1959a).

Chrysis syrdarica Mocsáry, 1909

(Plate 57A-57F)

Chrysis (Tetrachrysis) syrdarica Mocsáry 1909: 5.

Type locality. Kazakhstan: *Baigakum, penes Djulek 30.V.1908*.

Holotype, \circlearrowleft : Baicakum bei Djulek Turkest. / 30.V.1908 // Espéce inconnue moi // *Syrdarica* Mocs. typ. det. Mocsáry // red label // Holotypus *Chrysis syrdarica* \circlearrowleft Mocs. RMB // id nr. 135391 HNHM Hym. coll..

Current status. Chrysis syrdarica Mocsáry, 1909.

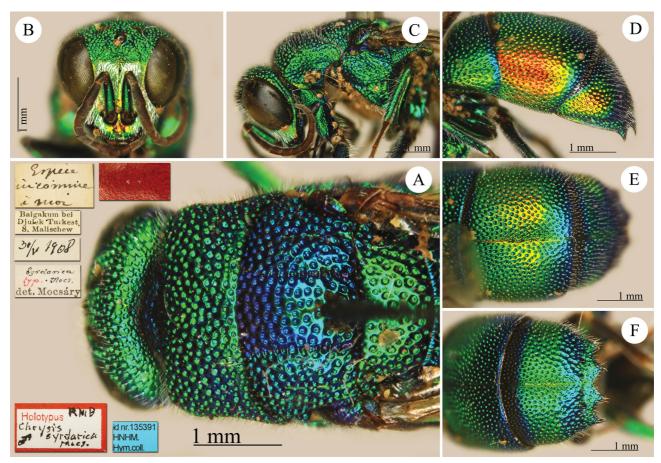


PLATE 57. *Chrysis syrdarica* Mocsáry, 1909, holotype ♂. **A**. Head and mesosoma, dorsal view; **B**. Head, frontal view; **C**. Head and mesosoma, lateral view; **D**. Metasoma, lateral view; **E**. T2, dorsal view; **F**. T3, posterior view.

(Plate 58A-58D)

Chrysis (Tetrachrysis) Thalhammeri Mocsáry 1889: 456.

Type locality. Romania and Serbia: "Hungaria meridionalis (Mus. Hung.)".

Lectotype, ♀: Vrdnik Pável // Lectotypus ♀ *Chrysis thalhammeri* Mocs. // id nr. 135103 HNHM Hym. coll.. **Paralectotype,** 1♀: Berzászka Tömösváry // Paralectotypus ♀ *Chrysis thalhammeri* Mocsáry // id nr. 135104 HNHM Hym. coll..

Remarks. Móczár (1965: 174) designated the lectotype. Móczár (1965, 1967b) considered *Ch. thalhammeri* as a valid species, Linsenmaier (1959a, 1968) as a subspecies of *Ch. distincta* Mocsáry, whereas Kimsey & Bohart (1991) as a synonym of *Ch. distincta* Mocsáry. *Ch. distincta* Mocsáry has a wide distributional range, from northern Africa (*Ch. poecilochroa* Mocsáry) to central Europe (*Ch. thalhammeri* Mocsáry), Caucasus (*Ch. distincta distincta* and *Ch. exigua* Mocsáry) and Pakistan (*Ch. quettaensis* Nurse). All these taxa have been considered synonyms of *Ch. distincta* by Kimsey & Bohart (1991) and separated to subspecies level by Linsenmaier (1959a, 1968). A revision of the species-group is needed and at the moment we follow Linsenmaier's interpretation of the taxa.

Current status. Chrysis distincta thalhammeri Mocsáry, 1889 (synonymised by Linsenmaier 1959a).

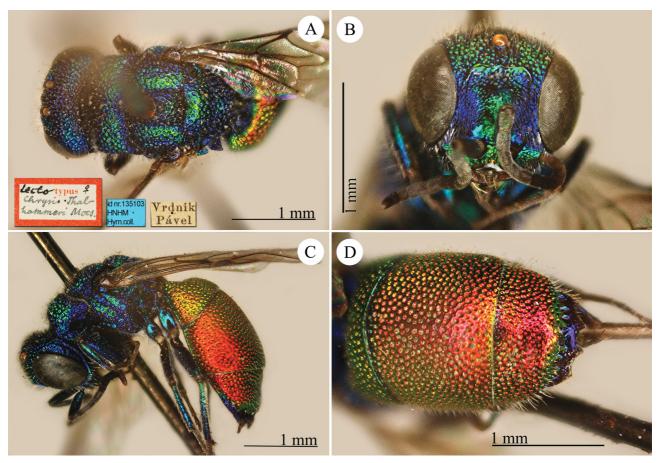


PLATE 58. *Chrysis thalhammeri* Mocsáry, 1889, lectotype ♀. **A.** Head and mesosoma, dorsal view; **B.** Head, frontal view; **C.** Habitus, lateral view; **D.** T2 and T3, posterior view.

Chrysis thalia Nurse, 1903

Chrysis thalia Nurse 1903b: 41.

Type locality. Pakistan: "Quetta".

Syntype, 1♀: Quetta // Collect. Bingham // *thalia* Nurse Bingham typ. // *Chrysis thalia* Nurse det. Mocsáry // id nr. 135338 HNHM Hym. coll..

Remarks. In Kimsey & Bohart (1991) the type depository was unknown. It belongs to the *splendidula* speciesgroup and it is similar to *Ch. kokandica* Radoszkowski because they share general habitus, colour, and shape of apical margin of T3; the main difference is the metasoma punctuation, deep, large and coarse in *Ch. kokandica* whereas with small and even punctures in *Ch. thalia*. The two species have been described based on different sex and therefore it is possible that *Ch. thalia* is the junior synonym of *Ch. kokandica*. Examination of more material is needed to confirm the synonymy.

Current status. Chrysis thalia Nurse, 1903.

Chrysis tibetana Mocsáry, 1914

Chrysis (Tetrachrysis) tibetana Mocsáry 1914: 43.

Type locality. Tibet: Gyangtse, ex eodem loco et expeditione, ut prior (Mus. Brit.).

Paralectotypes, 3♂♂ and 1♀: Gyangtse 13,000 ft. June 1904 Tibet Exped. H.J. Walton // VI.1904 // *Chrysis tibetana* Mocs. typ. det. Mocsáry // red label // Paralectotypus *Chrysis tibetana* Mocs. RMB // id nr. 135326-135329 HNHM Hym. coll..

Possible paralectotype, 1♂: Gyangtse 13,000 ft. June 1904 Tibet Exped. H.J. Walton // VI.1904 // id nr. 115645 HNHM Hym. coll..

Remarks. Bohart (in Kimsey & Bohart 1991) designated the lectotype deposited at BMNH. *Chrysis tibetana* Mocsáry, 1914 belongs to the *ignita* species-group. Pictures of one paralectotype are in Rosa *et al.* (2014: 110, plate 57).

Current status. Chrysis tibetana Mocsáry, 1914.

Chrysis turcica Mocsáry, 1914

Chrysis (Olochrysis) turcica Mocsáry 1914: 18, nom. praeocc. nec du Buysson 1908.

Type locality. Turkey: "Asia minor: Sille [= Sile], 9/VI. 1911. (Mus. Hung.)".

Holotype, ♀: Asia min. Sille // VI.9. // *turcica* Mocs. typ. det. Mocsáry // *Chrysura erigone* (Mocsáry) det. F. Strumia // id nr. 135643.

Current status. Chrysura erigone (Mocsáry, 1889) (synonymised by Linsenmaier 1959a, and transferred by Kimsey & Bohart 1991).

Chrysis vafra Mocsáry, 1914

Chrysis (Gonochrysis) vafra Mocsáry 1914: 21.

Type locality. Morocco: "Regnum Maroccanum (Mus. Hung.)".

Holotype, \subsetneq : Regnum Maroccanum // *vafra* Mocs. typ. det. Mocsáry // red label // *Chrysis* L. *tafnensis* Luc. Linsenmaier det. 59 // Holotypus \subsetneq *Chrysis vafra* Mocs. // id nr. 135199 HNHM Hym. coll..

Current status. Chrysis tafnensis Lucas, 1849 (synonymised by Linsenmaier 1959a).

Chrysis valerii Semenov, 1910

Chrysis valerii Semenov-Tian-Shanskij 1910: 223.

Type locality. Kazakhstan: "Turkestan occid.: Dzhulex prov. Syr-darjensis (J. Baeckmann leg. 22.V.1905). - 5 specimina (5♂), inter se prorsus consentanea (coll. Semenov-Tian-Shansky)".

Paratype, 1♂: Dzhulek [in Cyrillic] 22.V.1905 J. Baeckmann // *Chrysis valerii* m. typ. ♂ A. Semenov-Tian-Shansky det. X.09 // red label // id nr. 135412 HNHM Hym. coll..

Remarks. The holotype is housed in ZISP. *Chrysis valerii* Semenov, 1910 belongs to the *smaragdula* speciesgroup (*fasciata* species-group by Linsenmaier 1959a).

Current status. Chrysis valerii Semenov-Tian-Shanskij, 1910.

Chrysis venusta Mocsáry, 1878

Chrysis venusta Mocsáry 1878: 247.

Type locality. Slovakia: "in Hungaria septemtrionali ad balnea Szliács [= Sliač], circa nidos Osmiae anthocopoides Schck. (caementariae Gerst.) mense Julio mihi in duobus exemplaribus conformibus obvia".

Lectotype, δ : 433-51 // Szliács // *Chrysis hybrida* Lep. det. Mocsáry // *Chrysis hybrida* Lep. det. Móczár // Lectotypus δ *Chr.* (*Holo-*) *venusta* Mocsáry // id nr. 135622 HNHM Hym. coll..

Paralectotype, 1♂: 433-51 // Szliács // Chrysis hybrida Lep. det. Mocsáry // Chrysis hybrida Lep. det. Móczár // Paralectotypus ♂ Chr. (Holo-) venusta Mocsáry // id nr. 135623 HNHM Hym. coll..

Remarks. Móczár (1965) designated the lectotype.

Current status. Chrysura hybrida (Lepeletier, 1806) (synonymised by Mocsáry 1889, and transferred by Kimsey & Bohart 1991).

Chrysis wollmanni Mocsáry, 1909

Chrysis (Tetrachrysis) Wollmanni Mocsáry 1909: 4.

Type locality. Kazakhstan: Baigakum, penes Djulek, 4-5.VI.1907. Duo specimina conformia.

Lectotype, ♀: Baigakum bei Djulek Turkest. L. Wollmann / 5.VI.1907 // wollmanni Mocs. typ. det. Mocsáry / Lectotypus *Chrysis wollmanni* ♀ Mocs. RMB // id nr. 135387 HNHM Hym. coll..

Paralectotype, ♀: Baigakum bei Djulek Turkest. L. Wollmann / 4.VI.1907 // wollmanni Mocs. typ. det. Mocsáry // Paralectotypus *Chrysis wollmanni* ♀ Mocs. RMB // id nr. 135387 HNHM Hym. coll..

Remarks. Bohart (in Bohart & French 1986) designated the lectotype.

Current status. Chrysis wollmanni Mocsáry, 1909.

Spinolia herodiana Morice, 1909

Spinolia herodiana Morice 1909: 467.

Type locality. West Bank: *Jericho, 27.iii.'09. Five* $\subsetneq \varphi$ *about burrows of Odynerus (Hoplopus) variegatus, F., near the stream coming from "Elisha's fountain.*

Syntype, 1♀: Jericho 27 III 09 // Co-type of *Spinolia herodiana* Morice // *Spinolia herodiana* Morice det. Mocsáry // id nr. 115598 HNHM Hym. coll..

Possible syntype, 1♀: Jericho Schmiedekn. // *Spinolia herodiana* Morice det. Mocsáry // id nr. 115599 HNHM Hym. coll..

Remarks. Kimsey & Bohart (1991: 552) reported 'holotype' housed at Oxford, but the type series includes five female syntypes. The specimen in Oxford cannot be considered as the lectotype by inference of "holotype" according to the Code (ICZN 1999: Article 74.5).

Current status. Spinolia theresiae (du Buysson, 1900) (synonymised by Linsenmaier 1968).

Spintharis aeraria Mocsáry, 1914

(Plate 59A-59F)

Spintharis aeraria Mocsáry 1914: 12.

Type locality. Turkey: "Asia minor: Hadji Tshôlü (Mus. Hung.)".

Holotype, ♀: Hadji Tshölü // Asia min. Náday 1911 // *aeraria* Mocs. typ. det. Mocsáry // Holotypus *Chrysis aeraria* ♀ Mocsáry // *Chrysis bihamata* group RM Bohart det. // id nr. 135142 HNHM Hym. coll. // *Chrysis* (*Spintharis*) *aeraria* Mocs. ♀ det. F. Strumia.

Current status. Chrysis aeraria (Mocsáry, 1914) (transferred by Linsenmaier 1959a).

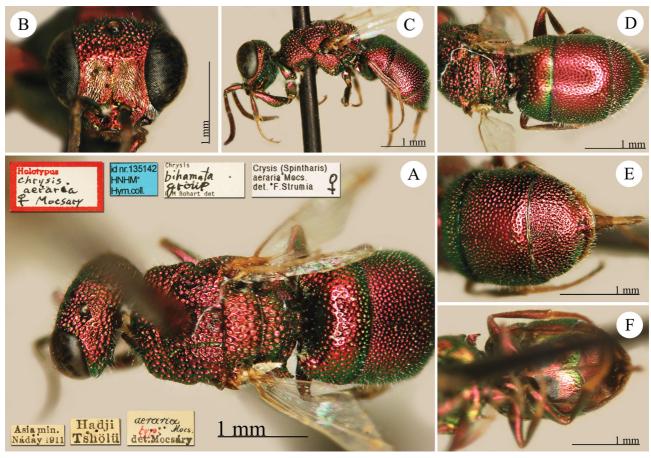


PLATE 59. *Spintharis aeraria* Mocsáry, 1914, holotype ♀. **A**. Habitus, dorsal view; **B**. Head, frontal view; **C**. Habitus, lateral view; **D**. Metanotum, propodeum and metasoma, dorsal view; **E**. T2 and T3, posterior view; **F**. Metasoma, ventral view.

Stilbum calens enslini Linsenmaier, 1951

Stilbum calens var. enslini Linsenmaier 1951: 90.

Type locality. France (Corse), Italy (Sicily), North Africa: "Sizilien, Korsika, Nordafrika".

Paratypes, 1 &: Algeria // Cotype Stilbum calens F. var. Enslini Linsenmaier // red label // Stilbum cyanurum Först. det. Mocsáry // id nr. 135659 HNHM Hym. coll.; 1 &: 1042-20 // Algeria // Cotype Stilbum calens F. var. Enslini Linsenmaier // red label // Stilbum cyanurum Först. det. Mocsáry // id nr. 135660 HNHM Hym. coll.; 1 &: Mann 1858 Sicilia // Cotype Stilbum calens F. var. Enslini Linsenmaier // red label // Stilbum cyan. v. siculum Tourn. det. Mocsáry // id nr. 135661 HNHM Hym. coll..

Remarks. Holotype and allotype are housed in the Linsenmaier collection at NMLS. Only the two specimens from Palermo (Italy, Sicily) are distinct from other species, whereas the paratypes from Corse and North Africa are

reddish specimens of *Stilbum cyanurum* (Forster, 1771). Kimsey & Bohart (1991) placed *St. calens* (Fabricius, 1781), *St. calens enslini* and *St. pici* du Buysson, 1896 in synonymy with *St. cyanurum* (Forster). Strumia (1995) resurrected *St. calens* from this synonymy, whereas Mingo (1994) resurrected *S. pici*.

Current status. Stilbum calens enslini Linsenmaier, 1951.

Stilbum chrysocephalum concolor Linsenmaier, 1951

Stilbum chrysocephalum var. concolor Linsenmaier 1951: 92.

Type locality. Australia, Indonesia: "Celebes [= Sulawesi], Roon, Australien".

Paratypes, 1♀: Roon ex coll. Früstorfer // Stilbum cyan. v. splendidum F. det. Mocsáry // Cotype Stilbum chrysocephalum Buyss. v. concolor Linsenmaier // red label // id nr. 135663 HNHM Hym. coll.; 1♀: Queensland Cairns 1904 // Stilbum cyan. v. splendidum F. det. Mocsáry // Cotype Stilbum chrysocephalum Buyss. v. concolor Linsenmaier // red label // id nr. 135663 HNHM Hym. coll..

Remarks. The holotype is housed in the Linsenmaier collection in NMLS. Another paratype is housed at BMNH. Kimsey & Bohart (1991) included *Stilbum chrysocephalum concolor* in the synonymic list of *St. cyanurum* (Forster, 1771). We follow Linsenmaier's interpretation of this taxon.

Current status. Stilbum chrysocephalum concolor Linsenmaier, 1951.

Tribe Elampini

Ellampus albipennis Mocsáry, 1889

Ellampus (Notozus) albipennis Mocsáry 1889: 80.

Type locality. Russia: "Russia meridionalis (Sarepta (Mus. Vindob.) et orientalis (Astrakan, Coll. Rad.; et Mus. Hung.)".

Lectotype, \circlearrowleft : Ryn-Pesky Astrahan // *albipennis* Mocs. typ. det. Mocsáry // Lectotypus *Ell. albipennis* Mocsáry // id nr. 134883 HNHM Hym. coll..

Remarks. Móczár (1964a: 447) designated the lectotype. Two paralectotypes from Sarepta and collected by Becker are deposited in NHMW. Pictures of the lectotype are in Rosa *et al.* (2014).

Current status. Elampus albipennis (Mocsáry, 1889) (transferred by Kimsey & Bohart 1991).

Ellampus angustatus Mocsáry, 1889

Ellampus (Notozus) angustatus Mocsáry 1889: 75.

Type locality. Germany, Hungary and Italy: "Hungaria centralis et meridionalis (Mus. Hung.); Tyrolis meridionalis (Bozen, Coll. Schmiedeknechti!); Germania (Thuringia, Coll. Schmiedeknechti!)".

Lectotype, ♂: Nádorh [= Nádorhegy] maj.29 // 374-14 // Budapest 1874 leg. Mocsáry // *angustatus* Mocs. typ. det. Mocsáry // 134881 HNHM Hym. coll..

Paralectotype, 1 \updownarrow : Gyón Kertész [Gyón = locality, Kertész = collector] / pvég 2. tergit [end of adbomen 2nd tergite] / Paralectotypus *angustatus* Mocsáry \updownarrow / id nr. 134880 [in collection under *Elampus panzeri*].

Possible paralectotype, 1 [sex unknown]: Dunasz julius // 636-72 // angustula (!) Mocs. typ det. Mocsáry // Not. constrictus Först. det. Móczár 1963 [under *Elampus constrictus*].

Remarks. Móczár (1964a: 444) designated the lectotype. Two paralectotypes are deposited in MNHU. Móczár (1964a) considered *Ellampus angustatus* as a variation of *Elampus constrictus* (Förster, 1853). Kimsey & Bohart (1991: 170) placed *El. angustatus* in synonymy of *El. scutellaris* Panzer, 1798 [currently *El. panzeri* (Fabricius, 1804)].

Current status. Elampus constrictus (Förster, 1853) (transferred by Kimsey & Bohart 1991).

Ellampus auratus cupratus Mocsáry, 1889

(Plate 60A, 60B)

Ellampus (Ellampus) auratus var. cupratus Mocsáry 1889: 92.

Type locality. Croatia: *Dalmatia (Mus. Hung.)*.

Holotype, ♀: Dalmatia //auratus v. cupratus m. typ. det. Mocsáry // Holotypus Ell. auratus var. cupratus Mocsáry // Pseudomalus auratus (Linnaeus, 1761 (!)) det. Muskovits, 2011 // id nr. 134844 HNHM Hym. coll..

Remarks. This species can be easily recognized by the carinate and subrectangular shape of profemur and the cupreous light violet colour of metasoma. The species was recently redescribed as *Pseudomalus meridianus* Strumia, 1996. This species has a large distributional range in Europe, from Italy to Austria, Greece, Hungary, and European Turkey (Rosa & Soon 2012). We found *Ps. cupratus* correctly identified in different museum collections, including the Paris collection (du Buysson 1899). After type examination, we here propose *Pseudomalus meridianus* Strumia, 1996, **syn. nov.** = *Pseudomalus cupratus* (Mocsáry, 1889).

Current status. Pseudomalus cupratus (Mocsáry, 1889).

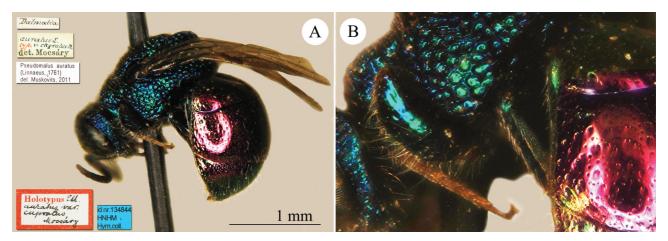


PLATE 60. Ellampus auratus cupratus Mocsáry, 1889, holotype, ♀. A. Habitus, lateral view; B. Profemur.

Ellampus auratus gasperinii Mocsáry, 1889 (Plate 61A–61F)

Ellampus (Ellampus) auratus var. Gasperinii Mocsáry 1889: 92.

Type locality. Croatia: "Dalmatia, a Dom. Gasperini detectus (Coll. Gasperinii et Mus. Hung.)".

Lectotype, ♀: Dalmatia Gasperinii // *Gasperinii* Mocs. typ. det. Mocsáry // Typus var. *Gasperinii* Mocs. // Lectotypus ♀ *Ellampus auratus gasperinii* Mocsáry (L.D. French) // id nr. 134902 HNHM Hym. coll.

Paralectotypes, 1♀: Spalato Gasperini // Typus var. *Gasperinii* Mocs. // Paralectotypus ♀ *Ellampus auratus gasperinii* Mocsáry (L.D. French) // id nr. 134903 HNHM Hym. coll.; 2♂♂ and 1♀: Dalmatia Gasperini // *Gasperinii* Mocs. typ. det. Mocsáry // Typus var. *Gasperinii* Mocs. // Paralectotypus *Ellampus auratus gasperinii* Mocsáry (L.D. French) // id nr. 134904, 134905, 134906 HNHM Hym. coll.; 1♂: Spalato Gasperinii https://docsary // Typus var. *Gasperinii* Mocs. // Paralectotypus ♂ *Ellampus auratus gasperinii* Mocsáry (L.D. French) // id nr. 134907 HNHM Hym. coll..

Remarks. French (in Bohart & French 1986) designated the lectotype. Kimsey & Bohart (1991: 266) and previous authors placed *Ell. auratus* var. *gasperinii* in synonymy with *Pseudomalus auratus* (Linnaeus, 1758). Nevertheless, *Ell. gasperinii* belongs to the genus *Omalus* sensu Kimsey & Bohart (1991) and *Omalus* (*Omalus*) sensu Linsenmaier (1959a). Moreover, it can be considered as a synonym of *Ellampus biaccinctus* du Buysson, 1893 (currently *Omalus biaccinctus*), even if the unique sculpture of mesosoma is not so markedly wrinkled as in the other European specimens of *O. biaccinctus*. du Buysson (1896, 1899) and Linsenmaier (1951: 96, in the synonymic list) already considered *O. gasperinii* as a variation of *O. biaccinctus* without respect of the Principle of

Priority. In fact, *Ell. gasperinii* has the priority over the name *O. biaccinctus*. Nevertheless, the name *O. biaccinctus* is in prevailing usage and the reversal of precedence can be applied according to the Article 23.9.1 ICZN (1999). All the required conditions are met: the senior synonym has not been used as a valid name after 1899 (Art. 23.9.1.1) and the junior synonym was used as its presumed valid name in more than 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years (Art. 23.9.1.2). According to the Code (Art. 23.9.2), *Ellampus biaccinctus* du Buysson, 1893 must be considered as **nomen protectum** and *Ellampus gasperinii* as **nomen oblitum**. *O. biaccinctus* (du Buysson) is one of the most common West Palaearctic chrysidid species, known from Europe and North Africa. Evidence requested by the Code to prove that the name *O. biaccinctus* is in current usage can be found in some dozens article; we list 25 references with the most relevant data for distribution, ecology and biology of this species: Arens (2014); González *et al.* (2009); Kunz (1994); Linsenmaier (1999); Mingo (1979, 1994); Niehuis (2001); Nikol'skaya (1978); Orlovskytė *et al.* (2010); Paukkunen *et al.* (2014, 2015); Rosa (2005, 2006); Rosa *et al.* (2013); Schljachtenok (2006); Schmid-Egger (2010); Schneider (2006); Strumia (1995); Strumia & Gayubo (2013); Strumia & Yildirim (2012); Szczepko *et. al.* (2012); Tormos *et al.* (1996); Tyrner 2007; Wei *et al.* (2014); Winterhagen (2015).

Current status. Omalus biaccinctus (du Buysson, 1893).

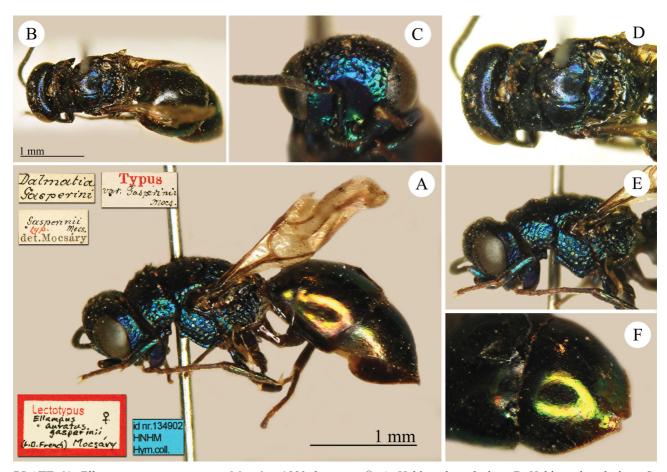


PLATE 61. *Ellampus auratus gasperinii* Mocsáry, 1889, lecotype, ♀. **A**. Habitus, lateral view; **B**. Habitus, dorsal view; **C**. Head, frontal view; **D**. Head and mesosoma, dorsal view; **E**. Head and mesosoma, lateral view; **F**. T3, postero-lateral view.

Ellampus auratus virescens Mocsáry, 1889

Ellampus (Ellampus) auratus var. virescens Mocsáry 1889: 91.

Type locality. Hungary, Romania, Russia: Russia mendionalis (Sarepta, Coll.Schultess-Rechbergi! et Saussurei!) Romania (Dobrutscha, Mus. Hung.); Hungaria centralis (Mus. Hung.).

Paralectotypes, 1♀: Budapest Wachsmann // Typus v. virescens Mocs. // Paralectotypus Ell. auratus var.

virescens Mocsáry // = pusillus F. det. L. Móczár 961 // id nr. 134846 HNHM Hym. coll.; 1♂: Kalocsa VI.83 // Typus v. virescens Mocs. // Paralectotypus Ell. auratus var. virescens Mocsáry // = pusillus F. det. L. Móczár 960 // id nr. 134847 HNHM Hym. coll.; 1♀: Cyny [...] argen [...] 24-5-7b // Budapest Mocsáry // Typus v. virescens Mocs. // non tipus ! O. pusillus det. L. Móczár 1961 // id nr. 115593 HNHM Hym. coll.; (?) 1♀: Romania Tulcea // auratus L. v. virescens m. // Paralectotypus Ell. auratus var. virescens Mocsáry // = pusillus F. det. L. Móczár 960 / Pseudomalus pusillus (Fabricius, 1804) det. Muskowits, 2011 // id nr. 134848 HNHM Hym. coll.; (?) 1♀: Romania Tulcea // auratus L. v. virescens m. // Paralectotypus Ell. auratus var. virescens Mocsáry // = pusillus F. det. L. Móczár 960 // Pseudomalus pusillus (Fabricius, 1804) det. Muskowits, 2011 // id nr. 134849 HNHM Hym. coll.; 1♀: Dobroudja Macin A.L. Montandon // Typus v. virescens Mocs. // Paralectotypus Ell. auratus var. virescens Mocsáry // Non tipus ! bogdanovi Rad. det. L. Móczár 1960 // Pseudomalus pusillus (Fabricius, 1804) det. Muskowits, 2011 // id nr. 134850 HNHM Hym. coll.; 1♀: Sarepta // Typus v. virescens Mocs // Non typus ! pusillus det. L. Móczár // Pseudomalus pusillus (Fabricius, 1804) det. Muskovits, 2011 // id nr. 115594 Hym. coll.

Remarks. Móczár (1964b: 436) designated the lectotype at ETH and paralectotypes are housed at MHNG. The type series includes specimens belonging to different species: *Pseudomalus auratus* (Linnaeus, 1758), *Omalus biaccinctus* (du Buysson, 1893) and *Ps. pusillus* (Fabricius, 1804). Some specimens were not labelled as paralectotypes by Móczár (1964b), even if previously labelled as "type" and matching Mocsáry's interpretation and type localities (id nr. 134850, 115593, 115594), therefore we consider them as part of the type series. Two specimens from Tulcea are not mentioned in the original type series but considered as paralectotypes by Móczár, and we list them in the type series.

Current status. *Pseudomalus auratus* (Linnaeus, 1758) (synonymised by Móczár 1964b, and transferred by Kimsey & Bohart 1991).

Ellampus cupratus Mocsáry, 1911

Ellampus (Notozus) cupratus Mocsáry 1911b: 443, nom. praeocc. nec Mocsáry 1889.

Type locality. Kyrgyzstan: "Turkestania: Naryn; anno adhuc 1906 legit Georgius Almásy hungarus (Mus. Hung.)".

Holotype, ♀: Turkestan Almásy 1906 // Naryn // *cupratus* Mocs. typ. det. Mocsáry // Typus *cupratus* Mocs. // Holotypus ♀ *cupratus* Mocsáry (L.D. French) // 134901 HNHM Hym. coll..

Remarks. This species belongs to *Philoctetes* Abeille de Perrin sensu Kimsey & Bohart (1991) and has wide distributional range, from southern Russia to Mongolia and China (Rosa *et al.* 2014). Mocsáry (1911b) included *Ell. cupratus* in the subgenus *Notozus* Förster (currently *Elampus* Spinola), for the elongated metanotal plate, at that time considered typical for this (sub)genus.

Current status. Philoctetes mongolicus (du Buysson, 1901) (synonymised by Rosa et al. 2015d: 437).

Ellampus foveatus Mocsáry, 1914

(Plate 62A-62F)

Ellampus (Notozus) foveatus Mocsáry 1914: 1.

Type locality. Bosnia and Herzegowina: *Bosnia (Mus. Hung.)*.

Lectotype, \circlearrowleft : Apfelb. Ilidže // Lectotypus \circlearrowleft *Ell. foveatus* Mocsáry // pvég 2. hátlemez előhát [end of abdomen 2. tergite pronotum] // id nr. 134887 HNHM Hym. coll.

Paralectotype, 1♀: Apfelb. Ilidže // *Notozus foveatus* det. Mocsáry // Paralectotypus ♀ *Ell. foveatus* Mocsáry // id nr. 134888 HNHM Hym. coll..

Remaks. Móczár (1964b) designated the lectotype.

Current status. Elampus foveatus (Mocsáry, 1914) (transferred by Kimsey & Bohart 1991).

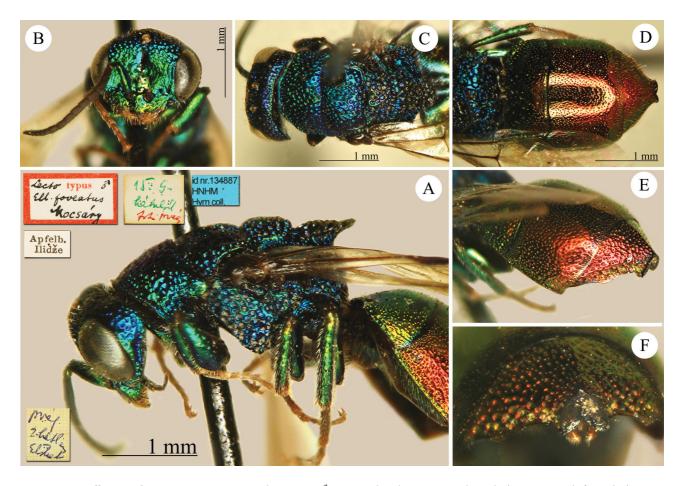


PLATE 62. *Ellampus foveatus* Mocsáry, 1914, lectotype, &. A. Head and mesosoma, lateral view; B. Head, frontal view; C. Head and mesosoma, dorsal view; D. Metasoma, dorsal view; E. Metasoma, lateral view; F. T3, posterior view.

Ellampus friesei Mocsáry, **1889** (Plate 63A–63C)

Ellampus (Philoctetes) Friesei Mocsáry 1889: 109.

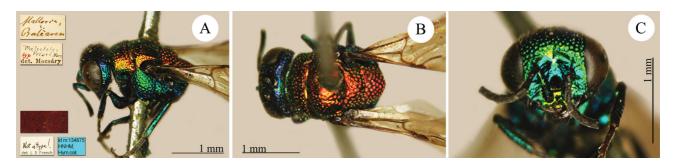


PLATE 63. *Ellampus friesei* Mocsáry, 1889, holotype, ♀. **A**. Head and mesosoma, lateral view; **B**. Head and mesosoma, dorsal view; **C**. Head, frontal view.

Type locality. Spain: "Insulae Baleares Hispaniae (Mallorca, Coll. Schmiedeknechti!)".

Holotype, ♀: Mallorca, Balearen // *Philoctetes Friesei* Mocs. typ. det. Mocsáry // red label // Not a type! det LD French // id nr. 134875 HNHM Hym. coll..

Remarks. Kimsey & Bohart (1991: 224) reported MNHU as the type repository, based on the indication given by Mocsáry (1889) "Coll. Schmiedeknecht", but they did not examine it and we could not find it or the curator (F.

Koch), either. Very likely Mocsáry kept the holotype in his collection, as he did when owners were not interested in receiving back the specimens. Evidence that this is the holotype is provided by the type identification label and the red label placed after Mocsáry's death. On the other hand, there is no evidence that the type is housed in Berlin. Kimsey & Bohart (1991) included *Ell. friesei* in *Holophris* Mocsáry, 1890, whereas Mingo (1994) and Rosa *et al.* (2015d) included it in the genus *Philoctetes* Abeille de Perrin, 1879. The specimen is badly damaged, lacking the metasoma.

Current status. Philoctetes friesei (Mocsáry, 1889) (transferred by Mingo 1994).

Ellampus imbecillus Mocsáry, 1889

(Plate 64A–64F)

Ellampus (Ellampus) imbecillus Mocsáry 1889: 98.

Type locality. Tajikistan and Turkmenistan: "Persia (Ashabad et Turkestania) Pendgikent ad limites Afghanistani. (Coll. Rad. et Mus. Hung.)".

Lectotype, ♀: Turkestan // *imbecillus* Mocs. typ. det. Mocsáry // Lectotypus ♀ *Ellampus imbecillus* Mocsáry (L.D. French) // id nr. 135046 HNHM Hym. coll..

Remarks. French (in Bohart & French 1986) designated the lectotype. Kimsey & Bohart (1991: 225) included *Ell. imbecillus* in the genus *Holophris* Mocsáry, 1890; it does not belong *Holophris* and following authors included *Ell. imbecillus* in the genus *Omalus* Panzer, 1801 (e.g. Linsenmaier 1994a; Rosa 2005; Wei *et al.* 2014).

Current status. Omalus imbecillus (Mocsáry, 1889) (transferred by Linsenmaier 1994a).

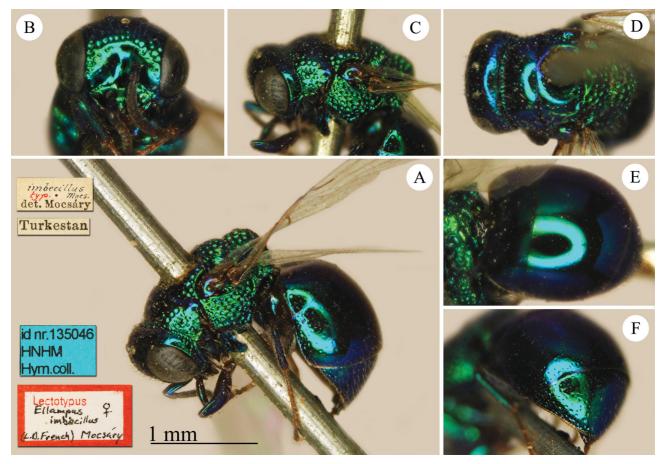


PLATE 64. *Ellampus imbecillus* Mocsáry, 1889, lectotype, ♀. **A.** Habitus, lateral view; **B.** Head, frontal view; **C.** Head and mesosoma, lateral view; **D.** Head and mesosoma, dorsal view; **E.** Metasoma, dorsal view; **F.** T3, posterior view.

Ellampus kashmirensis Nurse, 1902

Ellampus kashmirensis Nurse 1902: 305.

Type locality. India: Kashmir, 5000 ft., on the banks of the Jhelum; several specimens..

Paralectotype, 1♀: Kashmir 5-6000 ft 5.01 // *Notozus kashmirensis* ♀ Nurse // Collect. Bingham // *Kashmirensis* Nurse Bingham typ. // Paralectotypus ♀ *Notozus kashmirensis* Nurse (L.D. French) // id nr. 134898 HNHM Hym. coll..

Remarks. Kimsey (1986) designated the lectotype deposited at BMNH.

Current status. Elampus kashmirensis (Nurse, 1902) (transferred by Kimsey & Bohart 1991).

Ellampus laevigatus Mocsáry, 1911

(Plate 65A-65D)

Ellampus laevigatus Mocsáry 1911b: 444.

Type locality. Turkmenistan: *Turcomania: Askhabad (Mus. Hung.)*.

Holotype, δ : Ashabad // *laevigatus* Mocs. Typ. det. Mocsáry // Typus *laevigatus* Mocs. // Holotypus *Ellampus laevigatus* δ Mocsáry // id nr. 134843 HNHM Hym. coll..

Remarks. The type is badly mounted, the left wings are glued on the ventral surface, the teeth of claws are not visible, the left flagellum is missing.

Current status. Omalus laevigatus (Mocsáry, 1911) (transferred by Kimsey & Bohart 1991).

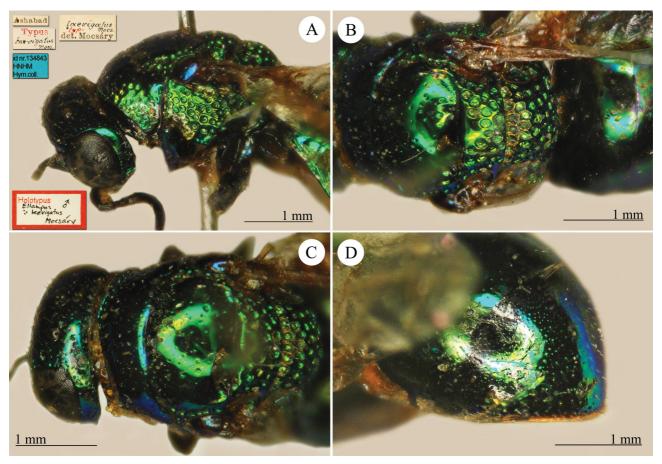


PLATE 65. *Ellampus laevigatus* Mocsáry, 1911, holotype, ♂. **A.** Head and mesosoma, lateral view; **B.** Mesosoma, dorsal view; **C.** Head and mesosoma, dorsal view; **D.** T3, postero-lateral view.

Ellampus puncticollis Mocsáry, 1887

(Plate 66A-66B)

Ellampus puncticollis Mocsáry 1887a: 291.

Type locality. Germany: Diese neue Art und Varietat [puncticollis var. atratus] wurde von Herrn Franz Sickmann bei Iburg, Provinz Hannover, im Juli und August, von den Blättern des Ribes rubrum et Vitis vinifera in zahlreichen Exemplaren gesammelt und mir zur Beschreibung gütigst überlassen.

Lectotype, ♀: Hannover Sichmann // ♀ // Illburg VIII-VII *Ribes aureum Vitis vinifera* // Lectotypus ♀ *puncticollis* Mocsáry // id nr. 134838 HNHM Hym. coll..

Paralectotypes, 1 \circlearrowleft and 2 \circlearrowleft \circlearrowleft : Hannover Sichmann // Paralectotypus *puncticollis* Mocsáry // id nr. 134835, 134836, 134837 HNHM Hym. coll..

Remarks. Móczár (1964b: 435) designated the lectotype. Some authors considered *Ellampus puncticollis* respectively as variation, subspecies or synonym of *Omalus aeneus* (Fabricius, 1787) (Trautmann 1927; Linsenmaier 1959a, 1997; Kimsey & Bohart 1991). But Paukkunen *et al.* (2014) consider *Ell. puncticollis* as a valid species in the genus *Omalus*, because genetically differs significantly from typical *O. aeneus* (Fabricius).

Current status. Omalus puncticollis (Mocsáry, 1887) (transferred to Omalus by Trautmann 1927).

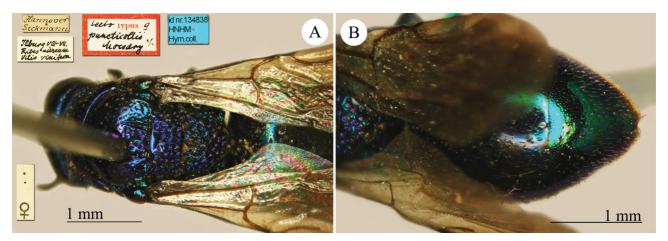


PLATE 66. Ellampus puncticollis Mocsáry, 1887, lectotype, ♀. A. Mesosoma, dorsal view; B. Metasoma, dorsal view.

Ellampus puncticollis atratus Mocsáry, 1887

Ellampus puncticollis var. atratus Mocsáry 1887a: 291.

Type locality. Germany: Diese neue Art und Varietät [puncticollis var. atratus] wurde von Herrn Franz Sickmann bei Iburg, Provinz Hannover, im Juli und August, von den Blättern des Ribes rubrum et Vitis vinifera in zahlreichen Exemplaren gesammelt und mir zur Beschreibung gütigst überlassen.

Lectotype, \circlearrowleft : Hannover Sichmann // \circlearrowleft // Illburg VIII-VII *Ribes aureum Vitis vinifera* // v. *atratus* typ. Mocs. det. Mocsáry // Lectotypus \circlearrowleft var. *atratus* Mocsáry // id nr. 134839 HNHM Hym. coll..

Paralectotypes, 3♂♂: Hannover Sichmann // ♂ // v. *atratus* typ. Mocs. det. Mocsáry // Paralectotypus ♂ var. *atratus* Mocsáry // id nr. 134840, 134841, 134842 HNHM Hym. coll..

Remarks. Móczár (1964b: 435) designated the lectotype. This variation is merely the male blackish form of *Omalus puncticollis* Mocsáry, 1887.

Current status. Omalus puncticollis Mocsáry, 1887 (transferred to Omalus by Trautmann 1927).

Ellampus schmiedeknechti Mocsáry, 1889

Ellampus (Ellampus) Schmiedeknechti Mocsáry 1889: 83.

Type locality. Germany: "Thuringia: Bibra penes Gumperda, mense Julio, Coll. Schmiedeknechti et Weissenfels, ab amico Friese inventus mihique donatus. Mus. Hung.".

Paralectotype, 1♀: Thüringen Weisenfels // Schmiedeknechti Mocs. typ. det. Mocsáry // Paralectotypus *Ellampus schmiedeknechti* Mocsáry 1889 // *Pseudomalus pusillus* (Fabricius, 1804) det. Muskovits, 2011 // id nr. 134851 HNHM Hym. coll..

Remarks. Móczár (1964b: 436) designated a male specimen at MNHU as the lectotype. It was considered as a variation or an aberration of *Pseudomalus pusillus* (du Buysson, 1892; Trautmann 1927; Linsenmaier 1951; Móczár 1964b).

Current status. Pseudomalus pusillus (Fabricius, 1804) (synonymised by Móczár 1964b, transferred by Kimsey & Bohart 1991).

Ellampus similis Mocsáry, 1889

Ellampus (Ellampus) similis Mocsáry 1889: 96.

Type locality. Romania: "Hungaria (Transsilvania apud Nagy-Csűr [= Nagycsűr] Mus. Hung.)".

Holotype, &: Nagy Csür Erdély, Rup. // similis Mocs. typ. det. Mocsáry // Holotypus & Ellampus similis Mocsáry // Omalus var. similis Mocs. det. Móczár 1963 // id nr. 134856 HNHM Hym. coll..

Current status. *Pseudomalus violaceus* (Scopoli, 1763) (synonymised by Linsenmaier 1951, transferred by Kimsey & Bohart 1991).

Ellampus soror Mocsáry, 1889

Ellampus (Notozus) soror Mocsáry 1889: 68.

Type locality. Italy: "Tergestinum (Triest) Austria, ad littora Maris Adriatici (Mus. Vindob!)".

Neotype, ♀: Budapest 30.VI // *Ellampus soror* Mocs. det. Mocsáry // 13: C-D // 16:C // *N. const.* var. det. Móczár 1963 // id nr. 134884 HNHM Hym. coll..

Remarks. Mocsáry (1889) described this species from a specimen collected in Trieste, Italy and deposited at NHMW. This type was considered lost because no longer housed in NHMW and the specimens labelled as types at HNHM cannot be considered as types because they were collected in Hungary, in localities not listed in the description (Budapest, Bugacz, Gyón). For these reasons Móczár (1964b) designated the neotype. Linsenmaier (1959a) considered *El. soror* as a synonym of *El. panzeri* [= contrictus] coeruleus whereas Móczár (1964b) considered *El. soror* as a variation of *El. constrictus*. In Kimsey & Bohart (1991), it is listed as a valid species. The type is only one of the multiple variations of *El. constrictus* (Förster, 1853).

Current status. Elampus constrictus (Förster, 1853) (transferred by Kimsey & Bohart 1991).

Ellampus timidus Nurse, 1902

Ellampus timidus Nurse 1902: 305.

Type locality. Pakistan: *Quetta*; *Peshin* [= Pishin]; *five specimens*.

Paralectotype, 1♀: Quetta // Collect. Bingham // *Ellampus timidus* Nurse ♀ // *timidus* Nurse Bingham typ. // paralectotypus ♀ *Ellampus timidus* Nurse (L.D. French) // id. nr. 135047 HNHM Hym. coll..

Remarks. Kimsey (1986) designated the male lectotype deposited at BMNH.

Ellampus violaceus virens Mocsáry, 1889

Ellampus (Ellampus) violaceus var. virens Mocsáry 1889: 107.

Type locality. Caucasus, Germany: "Thuringia (Coll. Schmiedeknechti!); Caucasus (Mus. Vindob.!)".

Paralectotype, 1 a: Germania Gumperda // *Ellampus violaceus* v. *virens* Mocs. det. Mocsáry // Paralectotypus *Ell. violaceus* var. *virens* Mocsáry // id nr. 134855 HNHM Hym. coll..

Remarks. Móczár (1964a) designated the lectotype deposited at MNHU. Another paralectotype is housed in NHMW.

Current status. *Pseudomalus violaceus* (Scopoli, 1763) (synonymised by Linsenmaier 1951, and transferred by Kimsey & Bohart 1991).

Ellampus wesmaeli Mocsáry, 1882

Ellampus Wesmaeli Mocsáry 1882: 27, nom. praeocc. nec Chevrier 1862. Ellampus Horváthi Mocsáry 1889: 82. Replacement name for Ellampus wesmaeli Mocsáry 1882.

Type locality. Hungary, Serbia: "Budapestnél (Friv.); Peszéren (Friv.); Csongrádm. Szatymáznál aug. 5. (Horváth); Temesm. Grebenácznál (Friv.)".

Lectotype, ♀: Deliblat 5.VII. // ♀ // Lectotypus ♀ *Ellampus horvathi* Mocsáry // id nr. 134866 HNHM Hym.

Paralectotypes, 1 ex. [sex unknown, without metasoma]: Grebenácz // 372-102 // 1875 // leg. Frivaldsky & Pável // Paralectotypus Ellampus horvathi Mocsáry // id nr. 134867 HNHM Hym. coll.; 1♀: Grebenácz 1875 // 372-102 // Omalus pusillus Wesm. var. det. Mocsáry // Paralectotypus ♀ Ellampus horvathi Mocsáry // id nr. 134868 HNHM Hym. coll.; 1♀: Pest 17.8.86 / leg. Frivaldszky // Paralectotypus ♀ Ell. horvathi Mocsáry // id nr. 134869 HNHM Hym. coll.; 1♀: Budapest Üllői út 1956 VII.1 // 24 // 88-50 / Ellampus horváthi Mocsáry // id nr. 134870 HNHM Hym. coll.; 1 ex. sex unknown [without metasoma]: Szatymaz (?) 5.8 // leg. Horváth // Paralectotypus Ellampus horvathi Mocsáry // id nr. 134871 HNHM Hym. coll.; 1♂: Pest 8.7.86 // leg. Frivaldszky // Horvathi Mocs. typ. det. Mocsáry // Paralectotypus ♂ Ell. horvathi Mocsáry // id nr. 134872 HNHM Hym. coll.; 1♂: Deliblat Hungaria [currenlty Serbia] Thalhammer // Paralectotypus Ellampus horvathi Mocsáry // id nr. 134874 HNHM Hym. coll..

Remarks. Móczár (1964a) designated the lectotype. *Ellampus horvathi* is a replacement name for *Ell. wesmaeli* Mocsáry, 1882 *nec* Chevrier, 1862. One specimen, without metasoma, is labelled: Madrid Hisp. // Typus *Horvathi* Mocs. // Not a type det. LD French. Pictures of the lectotype are in Rosa *et al.* (2014).

Current status. Philoctetes horvathi (Mocsáry, 1889) (transferred by Kimsey & Bohart 1991).

Hedychridium hungaricum Móczár, 1964

(Plate 67A-67F)

Hedychridium hungaricum Móczár 1964b: 442.

Type locality. Hungary: Ócsa-Nagyerd, 28.VIII.1952, leg. Dr. L. Móczár, 3, auf Daucus carota (Coll. Mus. Nat. Hung.)".

Holotype, ♂: Ócsa-Nagyerd 1952.VIII.28 // Daucus carota // leg. Móczár // Hedychridium spec. nov.? 1960 det. L. Móczár // Hedychridium spec. ? det. Zimmermann // Holotypus Hedychridium hungaricum Móczár // id nr. 135013 HNHM Hym. coll..

Remarks. This species is similar to *Hedychridium mediocrum* Linsenmaier, 1987, but separated by the metallic reflection on S2.

Current status. Hedychridium hungaricum Móczár, 1964.

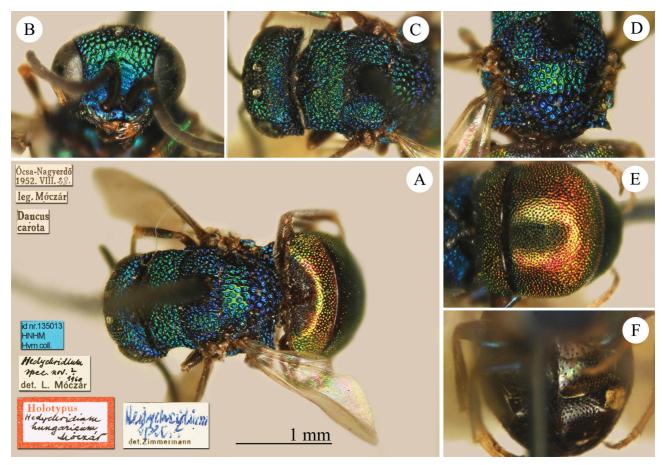


PLATE 67. Hedychridium hungaricum Móczár, 1964, holotype, S. A. Habitus, dorsal view; B. Head, frontal view; C. Head and mesosoma, dorsal view; D. Mesosoma, dorsal view; E. Metasoma, dorsal view; F. Metasoma, ventral view.

Hedychridium jazygicum **Móczár, 1964** (Plate 68A–68D)

Hedychridium jazygicum Móczár 1964b: 444.

Type locality. Hungary: *Jászberény, 1938, leg. Dr. L. Móczár,* ♀ (Coll. Mus. Nat. Hung.).

Holotype, ♀: Jászberény Móczár 1938 // coll. M. Móczár // *Hedychridium* spec. ? *adventicium* ?? <handwritten by Zimmermann> // Holotypus ♀ *Hedychridium jazygicum* 1964 Móczár L. // id nr. 135023 HNHM Hym. coll..

Remarks. Before the description of *Hedychridium jazygicum*, Móczár sent the specimen to S. Zimmermann for identification and comparison with *H. adventicium* Zimmermann. Zimmermann was not sure about the affinities of the specimens and labelled it as "*Hedychridium* spec. ? *adventicium* ??". Anyway Móczár (1964b) decided to describe it as a new species, based on some small differences found in the shape of metasoma. However, even if few differences in the colouration can be observed, the shape of metasoma and the swelling on third tergite are apparently the same. We think that this species is a synonym of *Hedychridium adventicium* Zimmermann, 1962, whose distribution is still unknown due to its rarity in collections. Therefore, we here propose the new synonym *H. adventicium* Zimmermann, 1962 = *H. jazygium* Móczár, 1964, **syn. nov.**. Arens (2014) also placed *H. viridisulcatum* Linsenmaier, 1968 (described from Greece) in synonym with *H. adventicium* Zimmermann.

At present, *H. adventicium* Zimmermann seems to have a large distributional range in South and Central Europe, from Peloponnese (Greece) (Arens 2014) to Austria (Zimmermann 1962) and Hungary (Móczár 1964b). Its distribution is very likely wider in southeast Europe, but this very small species could be overlooked in the field and misidentified with *H. monochroum* du Buysson, 1888 in museum collections.

Current status. Hedychridium adventicium Zimmermann, 1962.

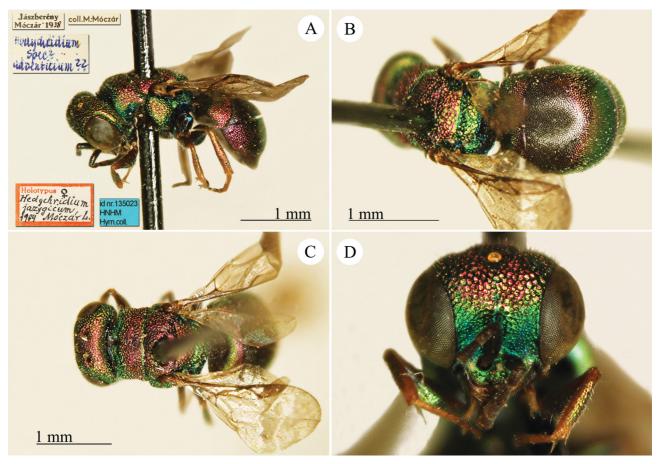


PLATE 68. *Hedychridium jazygicum* Móczár, 1964, holotype, ♀. **A**. Habitus, lateral view; **B**. Habitus, dorsal view; **C**. Habitus, dorsal view; **D**. Head, frontal view.

Hedychrum aureicolle Mocsáry, 1889 (Plate 69A–69D)

Hedychrum aureicolle Mocsáry 1889: 168.

Type locality. Greece: Rhodes; Turkey: "Asia minor (Mus. Hung.); insula Rhodus (Dhlb.)".

Lectotype, \bigcirc : Asia min. // 686-20 // *aureicolle* Mocs. typ. det. Mocsáry // Lectotypus \bigcirc *Hed. aureicolle* Mocsáry // *Hedychrum* \bigcirc *aureicolle* Mocs. det. F. Strumia // id nr. 135008 HNHM Hym. coll..

Paralectotypes, $2 \supseteq \bigcirc$: Asia min. // 807-31 // *Hed. aureicolle* Mocs. typ. det. Mocsáry // Paralectotypus \supseteq *Hed. aureicolle* Mocsáry // *Hedychrum* \supseteq *aureicolle* Mocs. det. F. Strumia // id nr. 135006, 135007 HNHM Hym. coll..

Remarks. Móczár (1964b) designated the lectotype.

Current status. Hedychrum aureicolle Mocsáry, 1889.

Hedychrum cribratum Mocsáry, 1909 (Plate 70A–70D)

Hedychrum cribratum Mocsáry 1909: 1.

Type locality. Kazakhstan: "Montes Karatau, penes Djulek 19. V.1908".

Holotype, ♂: Karataugebirge dei Djulek Turk. L. Wollmann / 19.V.1908 // cribratum Mocs. typ. det. Mocsáry // Holotypus ♂ *Hedychrum cribratum* Mocsáry (L.D. French) // id nr. 135009 HNHM Hym. coll..

Remarks. The male holotype of *Hedychrum cribratum* was collected at the same date and locality with the female types of *He. punctigerum* Mocsáry, 1909. The two species share the similar unique body colouration, whereas few sexual dimorphic characters are observed: male with protibia non-metallic pale yellowish, with a weak metallic greenish reflection, female with metallic colour more extensive on tibia; male metasoma bears larger punctures compared with those of female, but this variable difference can be attributed to sexual dimorphism. Other specimens of both sexes have been examined at ZISP. Therefore, we consider *He. punctigerum* Mocsáry, 1909 as the female of *He. cribratum* Mocsáry, 1909. Although they are not of the same sex, we here propose the new synonym *Hedychrum cribratum* Mocsáry, 1909 = *Hedychrum punctigerum* Mocsáry, 1909, **syn. nov.** after an examination of some dozens of specimens deposited at ZISP.

Current status. Hedychrum cribratum Mocsáry, 1909.

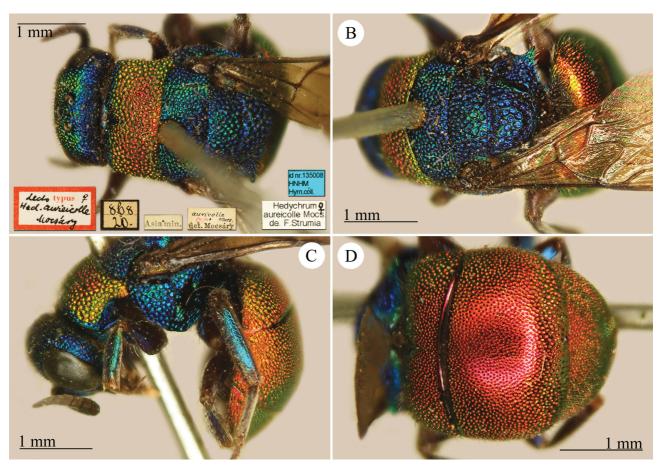


PLATE 69. *Hedychrum aureicolle* Mocsáry, 1909, lectotype, ♀. **A**. Head and mesosoma, dorsal view; **B**. mesosoma, dorsal view; **C**. Habitus, lateral view; **D**. Metasoma, dorsal view.

Hedychrum cyaneum Mocsáry, 1889

Hedychrum cyaneum Mocsáry in Radoszkowski 1889: 10, nom. praeocc. nec Brull 1846. Hedychrum simile Mocsáry 1889: 158. Replacement name for He. cyaneum Mocsáry in Radoszkowski 1889 nec Brull 1846.

Type locality. Russia: "Sibérie orientale".

Lectotype, ♀: Ta-tschian-sy // 801-31 // *simile* Mocs. typ. det. Mocsáry // Lectotypus ♀ *Hedychrum simile* Mocsáry (L.D. French) // id nr. 134955 HNHM Hym. coll..

Remarks. Mocsáry (in Radoszkowski 1889) described *Hedychrum cyaneum* (later replaced with the name *He. simile*) based on a type series $[\lozenge \circlearrowleft]$. However, in the original description, only the type locality *Sibérie orientale* [= East Siberia] is mentioned. In Radoszkowski's collection at ISEA-PAN only one male from Siberia is housed (Rosa *et al.* 2015e). Radoszkowski (1889: fig. 15A, 15B) drew the genital capsula of this male specimen housed in his collection.

After the original description, Mocsáry (1889: 158), under the replacement name *He. simile*, extended the type locality: *Siberia orientalis (Coll. Rad.! et Mus. Hung.); China borealis (Ta-tschian-sy, Mus. Hung.)*. French (in Bohart & French 1986) designated the female specimen from China listed by Mocsáry (1889) as the lectotype, even if not mentioned in the original description (Radoszkowski 1889). Pictures of the lectotype are in Rosa *et al.* (2014: 88, plate 15).

Current status. Hedychrum simile Mocsáry, 1889.

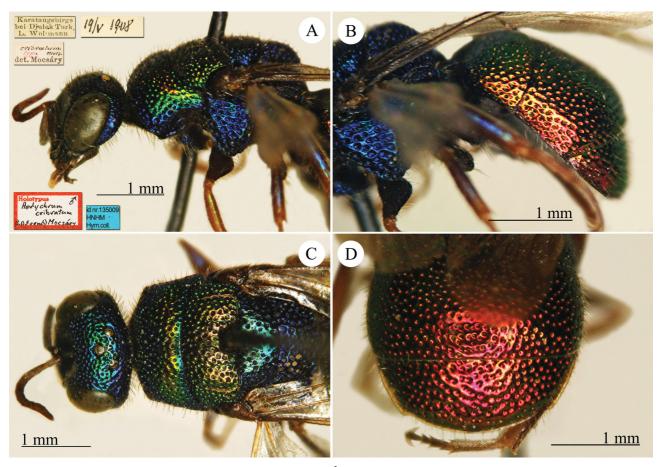


PLATE 70. *Hedychrum cribratum* Mocsáry, 1909, holotype, ♂. **A**. Head and mesosoma, lateral view; **B**. Metasoma, lateral view; **C**. Head and mesosoma, dorsal view; **D**. T2 and T3, posterior view.

Hedychrum frivaldszkyi Mocsáry, **1889** (Plate 71A–71D)

Hedychrum Frivaldszkyi Mocsáry 1889: 164.

Type locality. Turkmenistan: "Territorium Maris Caspii (Krasnowodsk [= Türkmenbaşy] a Clariss. Dom. Ferdinando Morawitz mihi donatum. Mus. Hung.)".

Holotype, \circlearrowleft : Transcaspia Krasnowodsk // Korskowodski // *Frivaldszkyi* Mocs. typ. det. Mocsáry // Holotypus \circlearrowleft *Hedychrum frivaldszkyi* Mocsáry (L.D. French) // id nr. 135005 HNHM Hym. coll..

Current status. Hedychrum frivaldszkyi Mocsáry, 1889.

Hedychrum luculentum Förster, 1853 (Plate 72A–72D)

(11000 /211 /22)

Hedychrum luculentum Förster 1853: 343.

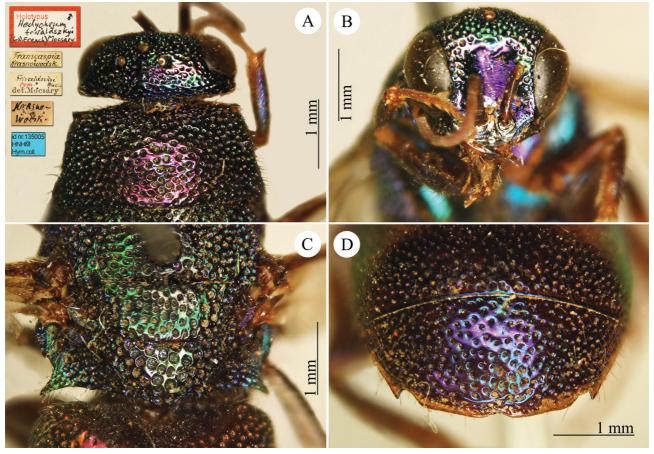


PLATE 71. *Hedychrum frivaldszkyi* Mocsáry, 1889, holotype, ♂. **A.** Head and pronotum, dorsal view; **B.** Head, frontal view; **C.** Mesoscutum, mesoscutellum and metanotum, dorsal view; **D.** T3, posterior view.

Type locality. Greece: Crete; Italy: "Ich besitze ein Exemplar dieser Art aus Italien, ein zweites Stück erhielt ich von der Insel Creta durch den Herrn Dr. von Frivaldszky zur Ansicht, an dem letzteren war das Gesicht, die Stirne und der Scheitel vorne so wie der Mittelbrustrücken schwach grünlichblau".

Lectotype (here designated), ♀: square white label // 798 // Ins. Creta // *Hedychrum lucullentum* (!) Först. det. Mocsáry // Syntype P. Rosa vidit // id nr. 115596 HNHM Hym. coll..

Remarks. Förster (1853) described *Hedychrum luculentum* based on two females collected in Italy and Crete; the latter was sent by Frivaldszky and it is still housed in Budapest. The Italian specimen should be deposited at MNHU. We checked the MNHU collection and found two males labelled by a former curator as type, without collecting locality labels. One could be a syntype; it is a male of *He. nobile* (Scopoli, 1763) and bears the following labels: "Först" <pri>printed red label> "14-623" and "Type" <printed red label>. The second specimen is a male of *He. rutilans* Dahlbom, 1854, bearing the following labels "14-751" and "Type" <pri>printed red label>. Trautmann (1927: 74) examined these two specimens and placed *He. luculentum* in synonym with *He. rutilans*, based on the examination of one of the two specimens, probably the one with more affinities with Förster's description. Abeille de Perrin (1879) considered *He. luculentum* as a probable synonym of *He. nobile*, without type examination. Mocsáry (1889: 171) gave the description of the female syntype housed in Budapest, which matches the description given by Linsenmaier (1959a), who added other diagnostic characteristics, such as the shape of the median tubercle on T3 in the female and the furrow on the male mesotibia. Since the specimen housed in Budapest matches the description and the current interpretation of the species, we designate it as the lectotype of *He. luculentum* Förster to fix the current interpretation of the species.

Current status. Hedychrum luculentum Förster, 1853.

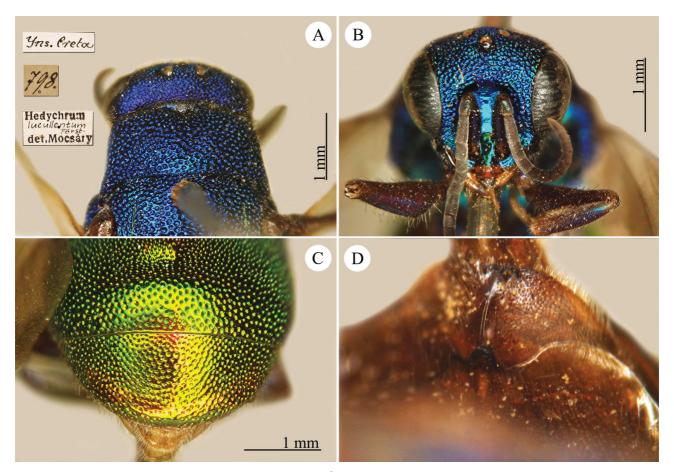


PLATE 72. *Hedychrum luculentum* Förster, 1853, lectotype, ♀. **A**. Head and pronotum, dorsal view; **B**. Head, frontal view; **C**. T3, posterior view; **D**. S3, ventral view.

Hedychrum marianum Mocsáry, 1911

Hedychrum Marianum Mocsáry 1911b: 450.

Type locality. China and Russia: "Sibiria: Ussuri (Kasakewitsh) et China (Mus. Hung.)".

Lectotype, ♀: China // *Marianum* Mocs. typ. det. Mocsáry // Lectotypus ♀ *Hedychrum marianum* Mocsáry (L.D. French) / id nr. 135010 HNHM Hym. coll..

Paralectotype, 1♀: Ussuri Kazakewitsh 1907 Korb // *marianum* Mocs. typ. det. Mocsáry // *Hedychrum* Ltr. *simile* Mocs. Linsenmaier det. 1959 // Paralectotypus ♀ *Hedychrum marianum* Mocsáry (L.D. French) // id nr. 135011 HNHM Hym. coll..

Remarks. French (in Bohart & French 1986) designated the lectotype. Pictures of the lectotype are in Rosa *et al.* (2014: 86, plate 11).

Current status. Hedychrum gerstaeckeri Chevrier, 1869 (synonymised by Kimsey & Bohart 1991).

Hedychrum plagiatum Mocsáry, 1883

(Plate 73A, 73B)

Hedychrum plagiatum Mocsáry 1883: 14.

Type locality. Turkey: "In Asia minore ad Brussam [= Bursa] ab Eduardo Merkl anno praeterito detectum est". **Holotype,** ♂: Brussa // 625-34 // Holotypus ♂ Hedychridium plagiatum Mocsáry // id nr. 135024 HNHM Hym. coll..

Remarks. Linsenmaier (1968) established *plagiatum* species-group, including *H. plagiatum* and *H. andalusicum* Trautmann in Maidl, 1922. Niehuis (1998) revised this species-group and described the third species: *H. wahisi* Niehuis, 1998 from Italy.

Current status. Hedychridium plagiatum (Mocsáry, 1883) (transferred by du Buysson 1892).

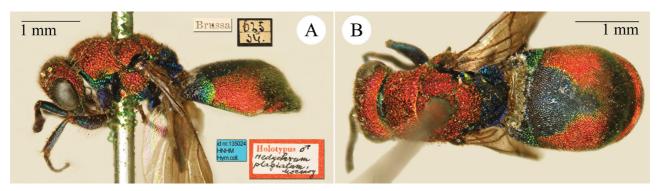


PLATE 73. Hedychrum plagiatum Mocsáry, 1883, holotype, S. A. Habitus, lateral view; B. Habitus, dorsal view.

Hedychrum punctigerum Mocsáry, 1909

Hedychrum punctigerum Mocsáry 1909: 2.

Type locality. Kazakhstan: "Montes Karatau, penes Djulek 15-19.V.1908".

Lectotype, ♀: Karataugebirge bei Djulek Turk. L. Wollmann / 19.V.2008 // *punctigerum* Mocs. typ. det. Mocsáry // Lectotypus ♀ *Hedychrum punctigerum* Mocsáry (L.D. French) // id nr. 134997 HNHM Hym. coll..

Paralectotypes, 2♀♀: Karataugebirge bei Djulek Turk. L. Wollmann / 19.V.2008 // punctigerum Mocs. typ. det. Mocsáry // Paralectotypus ♀ Hedychrum punctigerum Mocsáry (L.D. French) // id nr. 134998, 135000 HNHM Hym. coll.; 1♂ and 4♀♀: Karataugebirge bei Djulek Turk. L. Wollmann / 15.V.2008 // punctigerum Mocs. typ. det. Mocsáry // Paralectotypus Hedychrum punctigerum Mocsáry (L.D. French) // id nr. 134999, 135001, 135002, 135003, 135004 HNHM Hym. coll..

Remarks. French (in Bohart & French 1986) designated the lectotype. The male labelled as paralectotype of *Hedychrum punctigerum* is probably a syntype of *He. cribratum* Mocsáry, 1909. In fact, the description of *H. punctigerum* is based only on females, whereas Mocsáry (1909) based the description of *He. cribratum* on an unknown number of males. The label "*punctigerum* Mocs. typ. det. Mocsáry" was added after Mocsáry (1909) and possibly is a case of mislabelling. We consider *He. punctigerum* as the female of *He. cribratum* Mocsáry (see above, under *He. cribratum*), and propose the synonym *Hedychrum cribratum* Mocsáry, 1909 = *Hedychrum punctigerum* Mocsáry, 1909, **syn. nov.** (see also under *H. cribratum* Mocsáry, 1909).

Current status. Hedychrum cribratum Mocsáry, 1909.

Hedychrum rutilans veterrimum Mocsáry, 1914 (Plate 74A–74D)

Hedychrum rutilans var. veterrimum Mocsáry 1914: 11.

Type locality. Turkey, Turkmenistan: "Ashabad et mons Ararat, quinque specimina conformia (Mus. Hung.)".

Lectotype, ♂: Mons Ararat // v. *veterrimum* Mocs. Det. Mocsáry // Lectotypus ♂ *Hedychrum rutilans veterrimum* Mocsáry (L.D. French) // *Hedychrum* Ltr. *Intermedium* ssp. *Veterrimum* Linsenmaier det. 1959 // id nr. 134943 HNHM Hym. Coll..

Paralectotypes, 1♂: Mons Ararat // v. veterrimum Mocs. Det. Mocsáry // Paralectotypus ♂ Hedychrum rutilans veterrimum Mocsáry (L.D. French) // Hedychrum Ltr. Intermedium ssp. Veterrimum Linsenmaier det. 1959 // id nr. 134944 HNHM Hym. Coll.; 2♂♂: Mons Ararat // v. veterrimum Mocs. Det. Mocsáry // Paralectotypus ♂

Hedychrum rutilans veterrimum Mocsáry (L.D. French) // id nr. 134945, 134946 HNHM Hym. Coll.; 1♂: Ashabad // v. veterrimum Mocs. Det. Mocsáry // Paralectotypus ♂ Hedychrum rutilans veterrimum Mocsáry (L.D. French) / id nr. 134947 HNHM Hym. Coll..

Remarks. French (in Bohart & French 1986) designated the lectotype. It is currently considered as a distinct subspecies (Linsenmaier 1959a, 1968) for the pronotum with deep and coarse punctuation distinctly convergent laterally.

Current status. Hedychrum rutilans ssp. veterrimum Mocsáry, 1914.

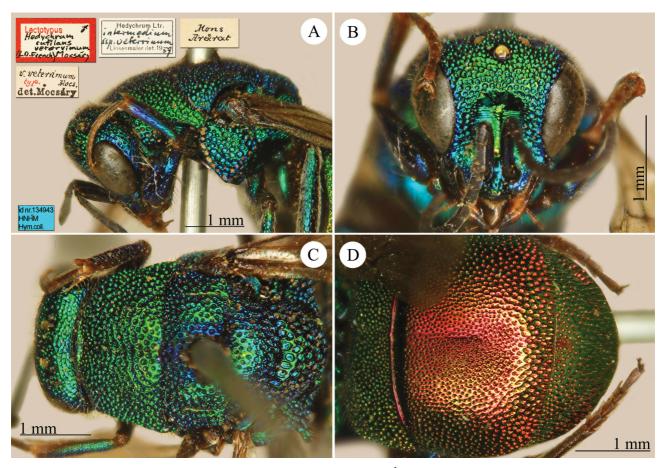


PLATE 74. *Hedychrum rutilans veterrimum* Mocsáry, 1914, lectotype, *A*. Head and mesosoma, lateral view; **B**. Head, frontal view; **C**. Head and mesosoma, dorsal view; **D**. Metasoma, dorsal view.

Hedychrum semicyaneum Mocsáry, 1889 (Plate 75A–75F)

Hedychrum semicyaneum Mocsáry 1889: 168.

Type locality. Uzbekistan: "Turkestania (Taschkend, Mus. Hung.)".

Holotype, ♀: Turkestania Taschkend // *Hed. Semicyaneum* Mocs. Typ. Det. Mocsáry // Holotypus ♀ *Hedychrum semicyaneum* Mocsáry (L.D. French) // id nr. 135012 HNHM Hym. Coll..

Current status. Hedychrum semicyaneum Mocsáry, 1889.

Hedychrum semiviolaceum Mocsáry, 1889

(Plate 76A-76F)

Hedychrum semiviolaceum Mocsáry 1889: 165.

Type locality. Austria and Hungary: "Hungaria centralis et Austria ad Vindobonam, species rara (Mus. Hung.)". **Lectotype**, ♂: Austria // 669-21 // Hed. semiviolaceum Mocs. Det. Mocsáry // Lectotypus ♂ Hed. Semicyaneum Mocsáry // id nr. 13948 HNHM Hym. Coll..

Paralectotype, 1♂: Gellérthegy jun 20 // Budapest // Paralectotypus ♂ *Hed. semicyaneum* Mocsáry // id nr. 134949 HNHM Hym. Coll..

Remarks. Móczár (1964b) designated the lectotype. Trautmann (1927), Linsenmaier (1951) and Kimsey & Bohart (1991) considered *Hedychrum semiviolaceum* as a synonym of *He. nobile* (Scopoli, 1763), but this synonymy is evidently in error and probably based only on body colouration, because Trautmann (1927) did not check Mocsáry's types. Móczár (1964b) considered *He. semiviolaceum* as a valid species and provided a diagnostic table to separate *He. semiviolaceum* from the very similar *He. niemelai* Linsenmaier, 1959. However, excluding the main differences found in the colouration, the only diagnostic characteristics to separate *He. semiviolaceum* from *He. niemelai* are the slightly longer furrow on the mesotibia and the denser punctuation on T2 and T3. Waiting for the confirmation of future molecular analysis, we follow Móczár (1964b) interpretation. Otherwise, if *He. niemelai* Linsenmaier is confirmed as the junior synonym of *He. semiviolaceum*, then a reversal of precedence is needed for this case (ICZN 1999: Article 23.9), because *He. niemelai* is the name currently in use in the last fifty years.

Current status. Hedychrum semiviolaceum Mocsáry, 1889.

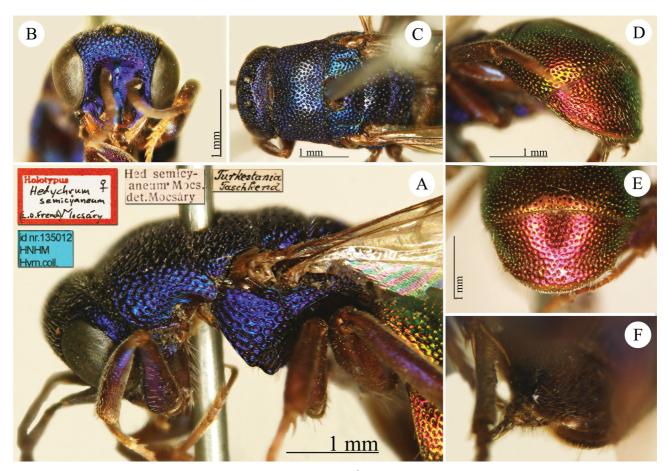


PLATE 75. *Hedychrum semicyaneum* Mocsáry, 1889, holotype, ♀. **A.** Head and mesosoma, lateral view; **B.** Head, frontal view; **C.** Head and mesosoma, dorsal view; **D.** Metasoma, lateral view; **E.** T3, posterior view; **F.** S3, ventral view.

Hedychrum szaboi Mocsáry, 1889

Hedychrum Szabói Mocsáry 1889: 167.

Type locality. Austria, France, Germany, Italy (Sicily), Poland, Russia, Ukraine: "Austria (Mus. Hung.); Silezia (Dhlb.); Germania (Berolinum, Dhlb.; Gumperda in Thuringia. Coll. Schmiedeknechti!); montes Pyraneici Galli

(Ab.); Sicilia (Dhlb.): Russia (Ukraine. Ab.: campi Orenburgenses, promontorium Uralense et Sibiria orientalis, Eversm.)".

Lectotype, ♀: Thüringen Gumperda // Lectotypus *Hed. Szaboi* Mocsáry // id nr. 134950 HNHM Hym. Coll.. **Paralectotype,** ♀: Austria // 669-20 // Paralectotypus *Hed. Szaboi* Mocsáry // id nr. 134951 HNHM Hym. Coll..

Remarks. Móczár (1964b) designated the lectotype. *Hedychrum szaboi* Mocsáry is the female of *He. chalybaeum* Dahlbom, 1854.

Current status. Hedychrum chalybaeum Dahlbom, 1854 (synonymised by Trautmann 1927).

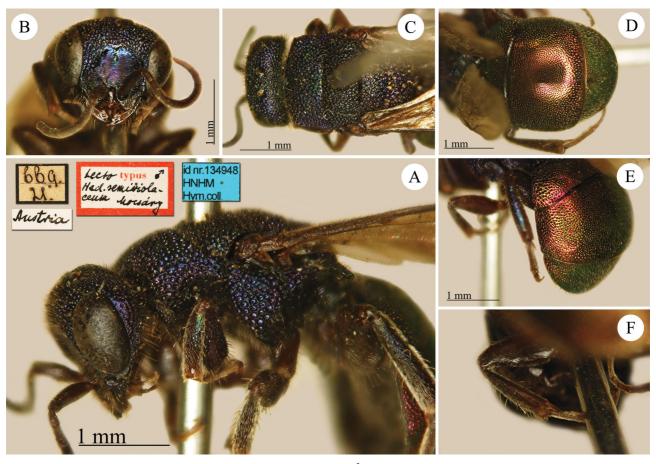


PLATE 76. *Hedychrum semiviolaceum* Mocsáry, 1889, lectotype, ♂. **A.** Head and mesosoma, lateral view; **B.** Head, frontal view; **C.** Head and mesosoma, dorsal view; **D.** Metasoma, dorsal view; **E.** Metasoma, lateral view; **F.** Mesotibia, ventral view.

Holopya almasyana Mocsáry, 1911 (Plate 77A–77D)

Holopya Almásyana Mocsáry 1911b: 445.

Type locality. Kyrgyzstan: "Turkestania: Naryn; pariter a Georgio Almasy in sua expeditione ad Turkestaniam anno 1906 detecta et Museo nostro donata (Mus. Hung.)".

Lectotype, ♀: Turkestan Almásy 1906 // Naryn // *Almasyana* Mocs. Typ. det. Mocsáry // Lectotypus ♀ *Holopyga almasyana* Mocsáry (L.D. French) // id nr. 134923 HNHM Hym. Coll..

Paralectotype, ♀: Turkestan Almásy 1906 // Naryn // *Almasyana* Mocs. Typ. det. Mocsáry // Paralectotypus ♀ *Holopyga almasyana* Mocsáry (L.D. French) // id. Nr. 134924 HNHM Hym. Coll..

Remarks. French (in Bohart & French 1986) designated the lectotype. *Holopyga almasyana* Mocsáry is the type-species of *Haba* Semenov, 1954.

Current status. Haba almasyana (Mocsáry, 1911) (transferred by Semenov-Tian-Shanskij 1954).

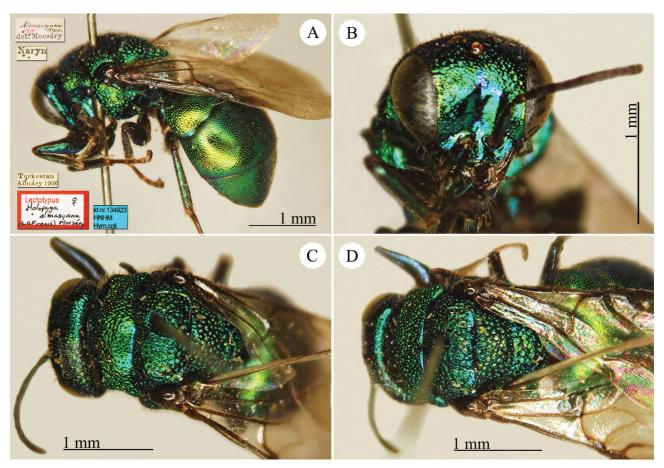


PLATE 77. *Holopya almasyana* Mocsáry, 1911, lectotype, ♀. **A.** Habitus, lateral view; **B.** Head, frontal view; **C.** Head and pronotum and mesoscutum, dorsal view; **D.** Mesosoma, dorsal view.

Holopyga amoena Mocsáry, 1911

(Plate 78A-78F)

Holopyga amoena Mocsáry 1911b: 446.

Type locality. West Bank: "Syria: Jericho; Dr. O. Schmiedecknecht invenit (Mus. Hung.)".

Holotype, ♀: Jericho Schmiedeckn. // *Holopyga* v. *amoena* Mocs. Det. Mocsáry // Holotypus *Holopyga amoena* Mocsáry (L.D. French) // id nr. 134935 HNHM Hym. Coll..

Remarks. Even if all tarsi are broken, it is possible to assign *Holopyga amoena* to *Hedychridium* Abeille de Perrin, 1878 and precisely to the *roseum* species-group [ex *sculpturatum* species-group]. Diagnostic are the shape of head, pronotum, metanotum and mesopleuron. This species is almost unknown in literature, because only Linsenmaier (1959a) gave a description of *Ho. amoena* after Mocsáry, copied from the original Latin description by Mocsáry, but apparently Linsenmaier did not examine the type; later it was only mentioned in checklists (e.g. Linsenmaier 1969; Kimsey & Bohart 1991).

Current status. Hedychridium amoenum (Mocsáry, 1911).

Holopyga bellipes Mocsáry, 1879

Holopyga bellipes Mocsáry 1879a: 121.

Type locality. Hungary: "In Hungaria centrali inventa est".

Holotype, ♀: Budapest 1878 elő. Leg. Kovács Gyala // 500-22 // *bellipes* Mocs. Typ. det. Mocsáry // *Holopyga bellipes* Mocsáry // *Colpopygia* (!) *flavipes* Ev. Det. Móczár // id nr. 135027 HNHM Hym. Coll..

Current status. *Hedychridium flavipes* (Eversmann, 1858) (synonymised by Mocsáry 1889, and transferred by du Buysson 1892).

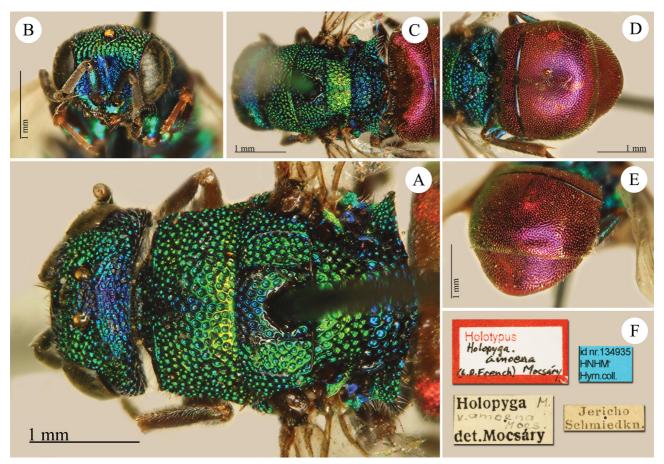


PLATE 78. *Holopyga amoena* Mocsáry, 1911, holotype, ♀. **A.** Head and mesosoma, dorsal view; **B.** Head, frontal view; **C.** Mesosoma, dorsal view; **D.** Metasoma, dorsal view; **E.** Metasoma, dorso-lateral view; **F.** Labels.

Holopyga biroi Mocsáry, **1911** (Plate 79A–79D)

Holopyga (Hedychridium) Birói Mocsáry 1911b: 447.

Type locality. Tunisia: "Tunisia: Gafsa; a L. Biró collega nostro anno adhuc 1903 detecta et in eius honorem denominata (Mus. Hung,)".

Holotype, \cite{Gafsa} : Gafsa Biró // *Hedychridium* n. sp. // *Biroi* Mocs. Typ. det. Mocsáry // Holotypus \cite{Gafsa} Holotypus $\cite{G$

Current status. Haba biroi (Mocsáry, 1911) (transferred by Kimsey & Bohart 1991).

Holopyga elegans Mocsáry, 1911

(Plate 80A-80D)

Holopyga (Hedychridium) elegans Mocsáry 1911b: 450.

Type locality. Turkey: "Asia minor: Smyrna [= İzmir] (Mus. Hung.)".

Lectotype, ♀: Smyrna Krüper // *elegans* Mocs. det. Mocsáry // Lectotypus ♀ *Holopyga elegans* Mocsáry (L.D. French) // id nr. 135026 HNHM Hym. coll..

Paralectotype, ♀: Smyrna Krüper // *elegans* Mocs. det. Mocsáry // Paralectotypus ♀ *Holopyga elegans* Mocsáry (L.D. French) // id nr. 135025 HNHM Hym. coll..

Remarks. French (in Bohart & French 1986) designated the lectotype.

Current status. Hedychridium femoratum (Dahlbom, 1854) (synonymised by Linsenmaier 1987).

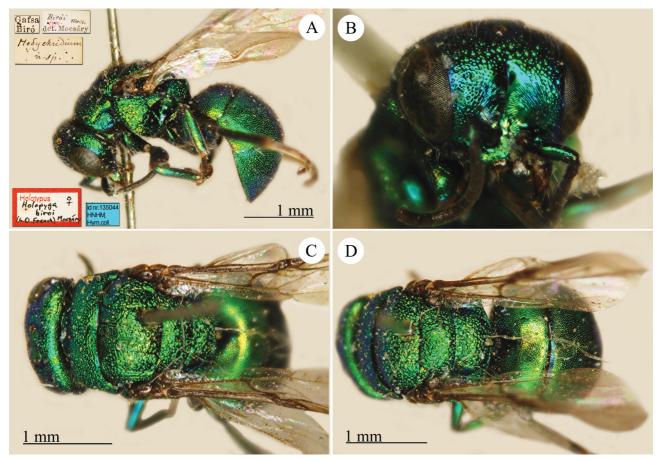


PLATE 79. *Holopyga biroi* Mocsáry, 1911, holotype, ♀. **A.** Habitus, lateral view; **B.** Head, frontal view; **C.** Head, pronotum, mesoscututm and mesoscutellum, dorsal view; **D.** Mesocutum, mesoscutellum, metanotum and T1, dorsal view.

Holopyga hirtipes du Buysson, 1902

Holopyga (Hedychridium) hirtipes du Buysson in Mocsáry 1902a: 340.

Type locality. Egypt: "Aegyptus (Cairo) (Mus. Hung.)".

Holotype, ♀: Aegyptus Schmkn. 97 // Cairo // *Hedychridium hirtipes* Buyss. Type! n. sp. du Buysson det. 1901 // *hirtipes* Mocs. typ. det. Mocsáry // Parasita: *Pararophitis quadratae* Friese // Holotypus ♀ *Holopyga hirtipes* Mocsáry (L.D. French) // id nr. 135043 HNHM Hym. coll..

Remarks. Holopyga hirtipes is the type-species of Hedychridium (Prochridium) Linsenmaier, 1968.

Current status. Prochridium hirtipes (du Buysson, 1902) (transferred by Kimsey & Bohart 1991).

Holopyga hortobagyensis Móczár, 1984

Holopyga hortobagyensis Móczár 1984: 354.

Type locality. Hungary: Hortobágy Újszentmargita, 1974.VI.15 leg. Hámoriné & Marótin.

Holotype, ♂: Hortobágy Újszentmargita // 1974.VI.13 leg. Hámoriné & Marótin // nyárfaliget fűhálózva // Holotypus ♂ *Holopyga hortobágyensis* Móczár, 1980 // Hym. Typ. No. 3663 Mus. Budapest / id nr. 134912 HNHM Hym. coll..

Remarks. The different collecting date between the original description and the collecting label is a *lapsus calami*. The different inventory number is probably originated by an exchange of the labels in the collection. The type is a melanic form of *Holopyga generosa* (Förster, 1853).

Current status. Holopyga generosa (Förster, 1853), syn. nov..

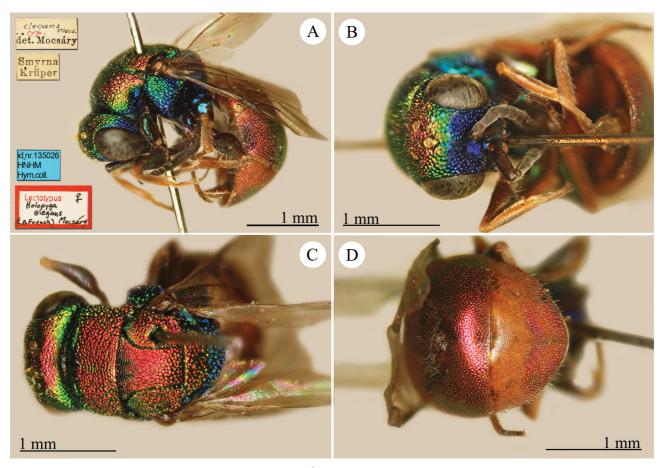


PLATE 80. *Holopyga elegans* Mocsáry, 1911, lectotype, ♀. **A**. Habitus, lateral view; **B**. Habitus, ventral view; **C**. Head and mesosoma, dorsal view; **D**. T2 and T3, posterior view.

Holopyga incensa Mocsáry, 1914

(Plate 81A, 81B)

Holopyga (Hedychridium) incensa Mocsáry 1914: 7.

Type locality. "Turkestania, quattuor specimina conformia (Mus. Hung.)".

Lectotype, ♀: Turkestan // *incensa* Mocs. det. Mocsáry // Lectotypus ♀ *Holopyga incensa* Mocsáry (L.D. French) // id nr. 135034 HNHM Hym. coll..

Paralectotypes, 3 = 2: Turkestan // *incensa* Mocs. det. Mocsáry // Paralectotypus = 2 Holopyga incensa Mocsáry (L.D. French) // id nr. 135035, 135036, 135037 HNHM Hym. coll..

Remarks. French (in Bohart & French 1986) designated the lectotype.

Current status. Hedychridum incensum (Mocsáry, 1914) (transferred by Linsenmaier 1959a).

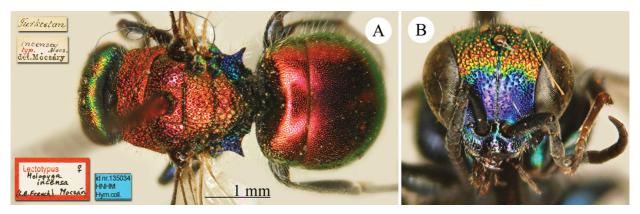


PLATE 81. *Holopyga incensa* Mocsáry, 1914, lectotype, ♀. **A.** Habitus, dorsal view; **B.** Head, frontal view.

Holopyga indica Mocsáry, 1889

Holopyga (Holopyga) Indica Mocsáry 1889: 118.

Type locality. India [or Buthan or Nepal]: "India orientalis (Mus. Hung.)".

Holotype (?), ♀: Himalaya // 602-12 // *indica* Mocs typ. det. Mocsáry // Holotypus *Holopyga indica* Mocsáry (L.D. French) // id nr. 134925 HNHM Hym. coll..

Remarks. This specimen is doubtfully considered as the holotype. In fact, it is unusual that Mocsáry reported the type locality "*India orientalis*" [East India] for a specimen collected in the Himalayas. Moreover, some characteristics do not fit the original description, such as the dimensions (the specimen is larger than 6.25 mm given by Mocsáry) and body colour. Morphological characteristics given by Mocsáry are probably not enough detailed to confirm if this specimen is truly the type, because they are valid for multiple species in the genus, such as shape of genae, metanotal teeth and punctuation. We consider this specimen doubtfully as the type, and let the first reviser decide about its status. A second specimen bearing a red label is not part of the type series because it was collected by Nurse at Abu, and arrived in the Mocsáry collection after the date of description.

Current status. Holopyga indica Mocsáry, 1889.

Holopyga iucunda Mocsáry, 1889

(Plate 82A-82D)

Holopyga (Hedychridium) iucunda Mocsáry 1889: 150.

Type locality. Hungaria centralis, mense Junio in 9 exemplaribus conformibus inventa; Austria inferior (Coll. Handlirschi!)".

Lectotype, ♀: Isaszeg // 774-15 // ante 1886 leg. Kuthy D. // Lectotypus *Holop. iucunda* Mocsáry // *Hedychridium jucundum* Mocs. det. Móczár 962 // id nr. 135018 HNHM Hym. coll..

Paralectotypes, 2♂♂: Budapest Mocsáry // Paralectotypus ♂ Holop. iucunda Mocsáry // Hedychridium jucundum Mocs. det. Móczár 962 // id nr. 135014, 135015 HNHM Hym. coll.; 1♀: Budapest Mocsáry // Paralectotypus Holop. iucunda Mocsáry // Hedychridium jucundum Mocs. det. Móczár 962 // Hedychridium jucundum Mocs. det. Zimmermann // id nr. 135016 HNHM Hym. coll.; 1♀: Isaszeg // 774-15 // ante 1886 leg. Kuthy D. // Paralectotypus Holop. iucunda Mocsáry // Hedychridium jucundum Mocs. det. Móczár 962 // id nr. 135017 HNHM Hym. coll.; 1♀: Pest 17.8.86 // Rákos // Paralectotypus Holop. iucunda Mocsáry // Hedychridium jucundum Mocs. det. Móczár 962 // id nr. 135019 HNHM Hym. coll.; 1♀: Péczel Kuthy // 681-7 // ante 1884 leg. Kuthy D. // Paralectotypus Holop. iucunda Mocsáry // Hedychridium jucundum Mocs. det. Móczár 962 // id nr. 135020 HNHM Hym. coll.; 1♀: Szom. Jun. 6 // Holopyga ardens Coq. det. Trautmann // Paralectotypus Holop. iucunda Mocsáry // Hedychridium jucundum Mocs. det. Móczár 962 // id nr. 135021 HNHM Hym. coll.; 1♀:

Kecskemét 16.6.84 // Paralectotypus *Holop. iucunda* Mocsáry // *Hedychridium jucundum* Mocs. det. Móczár 962 / / id nr. 135022 HNHM Hym. coll..

Remarks. Móczár (1964a) designated the lectotype. Authors after Mocsáry (1889) (e.g. du Buysson 1892: 198; Bischoff 1913: 14; Trautmann 1927: 68; Balthasar 1954: 115; Zimmermann 1954: 4; Linsenmaier 1959a: 49, 1987: 139, 1997: 254; Móczár 1964b: 446; Kimsey & Bohart 1991: 197) and before Mingo (1994) used the subsequent incorrect spelling *Hedychridium jucundum*, which is still in current use (e.g. Strumia 1995: 3, 2012: 65; Generani *et al.* 2002: 59; Rosa 2005: 28, 2006: 170; 2009: 237; Tyrner 2007: 47; Strumia & Yildirim 2009: 82; Rosa & Soon 2012; Strumia & Gayubo 2013: 476; Pavesi & Rosa 2013: 48; Arens 2014: 588; Baldock 2014: 223). Therefore, we propose the maintenance of the incorrect current spelling *H. jucundum* according to Article 33.3.1 (ICZN 1999).

Current status. Hedychridium jucundum (Mocsáry, 1889) (transferred by du Buysson 1892).

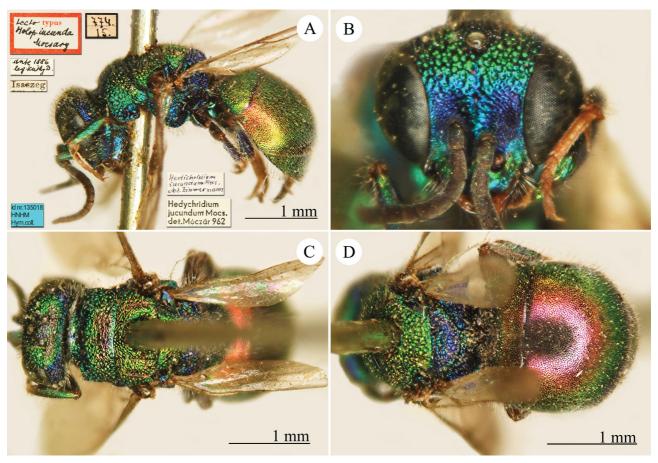


PLATE 82. *Holopyga iucunda* Mocsáry, 1889, lectotype, ♀. **A**. Habitus, lateral view; **B**. Head, frontal view; **C**. Head, pronotum and mesoscututm, dorsal view; **D**. Mesoscutellum, metanotum, propodeum and metasoma, dorsal view.

Holopyga kaszabi Móczár, 1967

Holopyga kaszabi Móczár 1967a: 187.

Type locality. Mongolia: "7 \lozenge " und $3 \trianglerighteq$ von derselben Lokalität und Datum: «Mongolia, Ostgobi aimak 40 km NW v. Chara-Eireg 1150m Exp. Dr. Z. Kaszab, 1963» [...] Holotypus (\lozenge) in Coll. Mus. Nat. Hung., Typ. Nr. 89; 5 \lozenge (Paratypen, Typ. Nr.90-94) und $1 \trianglerighteq$ (Paratype, Typ. Nr. 95 und 1 Allotypus \trianglerighteq (Typ. Nr. 96) in Coll. Mus. Nat. Hung. ferner $1 \lozenge 1 \trianglerighteq$ Paratypen in Coll. Linsenmaier".

Holotype, ♂: Mongolia, Ostgobi aimak 40 km NW v. Chara-Eireg 1150m Exp. Dr. Z. Kaszab, 1963 // Nr. 62 30.VI.63 // Holotypus ♂ *Holopyga kaszabi* n. sp. det. Móczár 1966 // Hym. Typ. No. 89 // id nr. 134927 HNHM Hym. coll..

Allotype, ♀: Mongolia, Ostgobi aimak 40 km NW v. Chara-Eireg 1150m Exp. Dr. Z. Kaszab, 1963 // Nr. 62

30.VI.63 // Allotypus $\stackrel{\frown}{}$ Holopyga kaszabi n. sp. det. Móczár 1966 // Hym. Typ. No. 96 // id nr. 134933 HNHM Hym. coll..

Paratypes, 1♂: Mongolia, Ostgobi aimak 40 km NW v. Chara-Eireg 1150m Exp. Dr. Z. Kaszab, 1963 // Nr. 62 30.VI.63 // Holopyga sp.n. ? <handwritten by Móczár> // ♂ Allotype Holopya Dhlb. diversicolor Lins. Linsenmaier 1966 // Paratypus ♂ Holopyga kaszabi n. sp. det. Móczár 1966 // Hym. Typ. No. 90 // id nr. 134928 HNHM Hym. coll.; 1♂: Mongolia, Ostgobi aimak 40 km NW v. Chara-Eireg 1150m Exp. Dr. Z. Kaszab, 1963 // Nr. 62 30.VI.63 // Paratypus ♂ Holopyga kaszabi n. sp. det. Móczár 1966 // Hym. Typ. No. 91 // id nr. 134929 HNHM Hym. coll.; 1♂: Mongolia, Ostgobi aimak 40 km NW v. Chara-Eireg 1150m Exp. Dr. Z. Kaszab, 1963 // Nr. 62 30.VI.63 // Paratypus ♂ Holopyga kaszabi n. sp. det. Móczár 1966 // Hym. Typ. No. 93 // id nr. 134930 HNHM Hym. coll.; 1♂: Mongolia, Ostgobi aimak 40 km NW v. Chara-Eireg 1150m Exp. Dr. Z. Kaszab, 1963 // Nr. 62 30.VI.63 // Paratypus ♂ Holopyga kaszabi n. sp. det. Móczár 1966 // Hym. Typ. No. 94 // id nr. 134931 HNHM Hym. coll.; 1♀: Mongolia, Ostgobi aimak 40 km NW v. Chara-Eireg 1150m Exp. Dr. Z. Kaszab, 1963 // Nr. 62 30.VI.63 // Holopyga gloriosa ? intermedia ? det. L. Móczár // Type Holopya Dhlb. diversicolor Lins. Linsenmaier 1966 // Paratypus ♀ Holopyga kaszabi n. sp. det. Móczár 1966 // Hym. Typ. No. 95 / id nr. 134932 HNHM Hym. coll..

Remarks. The name *Holopyga diversicolor* Linsenmaier was never published. Two paratypes of *Ho. kaszabi* Móczár are housed in the Linsenmaier collection (NMLS).

Current status. Holopyga kaszabi Móczár, 1967.

Holopyga kuthyana Mocsáry, 1911 (Plate 83A–83D)

Holopyga Kuthyana Mocsáry 1911b: 446.

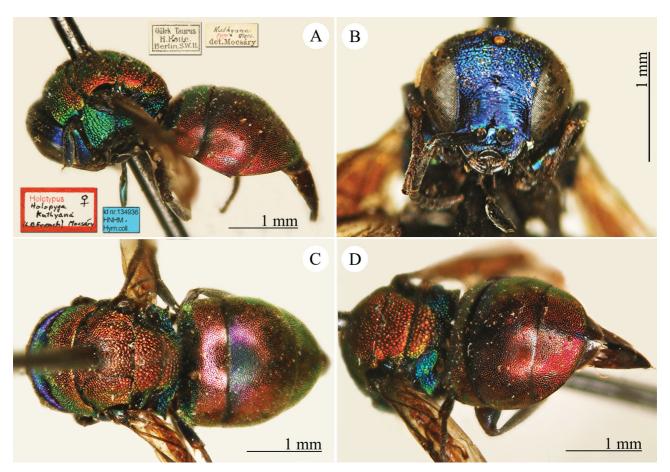


PLATE 83. *Holopyga kuthyana* Mocsáry, 1911, holotype, ♀. **A**. Habitus, lateral view; **B**. Head, frontal view; **C**. Habitus, dorsal view; **D**. Mesosoma and metasoma, postero-lateral view.

Type locality. Turkey: "Asia minor: Gülek Taurus (Mus. Hung.)".

Holotype, ♀: Gülek Taurus H. Rolle Berlin, S.W.H. // *Kuthyana* Mocs typ. det. Mocsáry // Holotypus ♀ *Holopyga kuthyana* Mocsáry (L.D. French) // id nr. 134936 HNHM Hym. coll..

Current status. Holopyga kuthyana Mocsáry, 1911.

Holopyga mlokosiewitzi inaurata Mocsáry, 1914 (Plate 84A–84D)

Holopyga Mlokosiewitzi var. inaurata Mocsáry 1914: 3.

Type locality. Armenia: "Armenia rossica: Erivan [= Yerevan] (Mus. Hung.)".

Holotype, ♀: Armenia Erivan // v. *inaurata* Mocs. typ. det. Mocsáry // Holotypus ♀ *Holopyga mlokosievitzi inaurata* Mocsáry (L.D. French) // id nr. 134934 HNHM Hym. coll..

Current status. Holopyga inaurata Mocsáry, 1914 was raised at species rank by Linsenmaier (1968).

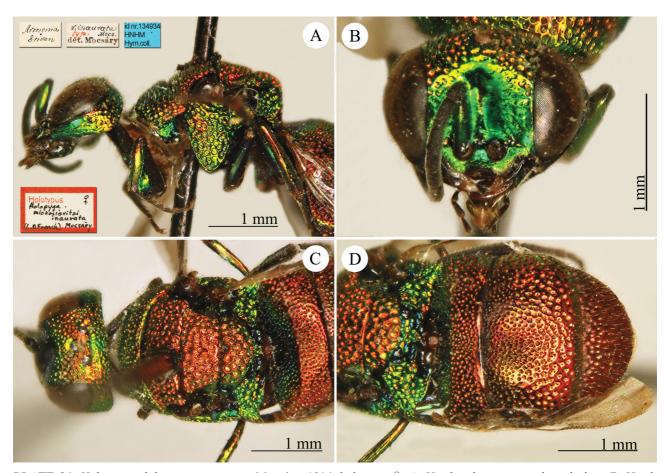


PLATE 84. *Holopyga mlokosiewitzi inaurata* Mocsáry, 1914, holotype, ♀. **A**. Head and mesosoma, lateral view; **B**. Head, frontal view; **C**. Head and mesosoma, dorsal view; **D**. Metasoma, dorsal view.

Holopyga punctatissima turkestanica Mocsáry, 1909 (Plate 85A–85F)

Holopyga punctatissima var. turkestanica Mocsáry 1909: 1.

Type locality. Kazakhstan: *♂*, sex exemplaria conformia. Montes Karatau, penes Djulek 15-19.V.1908. **Lectotype**, *♂*: Karataugebirge bei Djulek Turk. L. Wollmann / 15.V.1908 // v. turkestanica Mocs. typ. det. Mocsáry // Lectotypus & Holopyga punctatissima turkestanica Mocsáry (L.D. French) // id nr. 134915 HNHM Hym. coll..

Paralectotypes, 2♂♂ and 1♀: Karataugebirge bei Djulek Turk. L. Wollmann / 15.V.1908 // v. *turkestanica* Mocs. typ. det. Mocsáry // Paralectotypus ♂ *Holopyga punctatissima turkestanica* Mocsáry (L.D. French) // id nr. 134916, 134919, 134920 HNHM Hym. coll.; 2♂♂: Karataugebirge bei Djulek Turk. L. Wollmann / 19.V.1908 // v. *turkestanica* Mocs. typ. det. Mocsáry // Paralectotypus ♂ *Holopyga punctatissima turkestanica* Mocsáry (L.D. French) // id nr. 134917, 134918 HNHM Hym. coll..

Remarks. French (in Bohart & French 1986) designated the lectotype. Kimsey & Bohart (1991: 229) placed *Holopyga punctatissima turkestanica* Mocsáry in synonymy with *Ho. amoenula* Dahlbom, 1845. *Ho. turkestanica* is a distinct species, easily recognizable by having the unique foveate, deep and large punctures on metasoma. It is the senior synonym of *Ho. crassepuncta* Semenov, 1954, whose type has been examined, which was collected in the same area around the Karatau Mt. Therefore, we propose the new synonym *Holopyga turkestanica* Mocsáry, 1909 = *H. crassepuncta* Semenov, 1954, **syn. nov.**

Current status. Holopyga turkestanica Mocsáry, 1909.

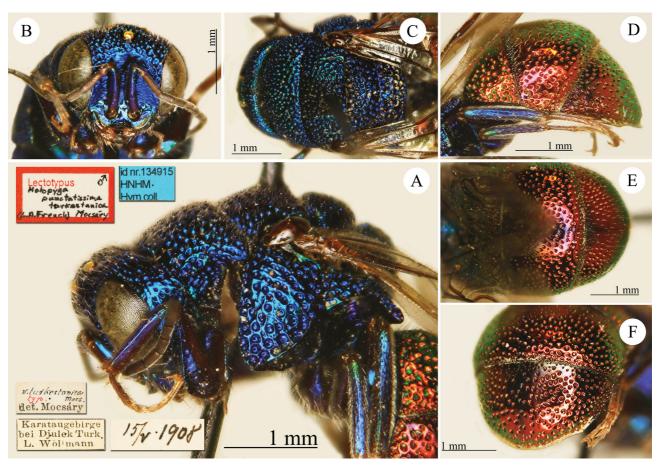


PLATE 85. *Holopyga punctatissima turkestanica* Mocsáry, 1909, lectotype, ♂. **A**. Head and mesosoma, lateral view; **B**. Head, frontal view; **C**. Head and mesosoma, dorsal view; **D**. Metasoma, lateral view; **E**. Metasoma, dorsal view; **F**. T2 and T3, postero-lateral view.

Holopyga similis Mocsáry, 1889

Holopyga (Holopyga) similis Mocsáry, 1889: 130.

Type locality. Hungary: "Hungaria centralis et meridionalis, mensibus Julio et Augusto sat rara".

Lectotype, ♀: Óbuda jul. 31 // similis Mocs. typ. det. Mocsáry // Lectotypus *Holopyga similis* Mocsáry // *Holopyga* Dhlb. *chrysonota* Först. Linsenmaier det. 59 // *H. g. chrysonota* Först. det. Móczár 1963 // id nr. 134910 HNHM Hym. coll..

Paralectotype (?), 1♂: Cality [or Gality?] 8.8 // Typus *similis* Mocs. // H. g. chrysonota Först. det. Móczár 1963 // 24: C 2. hátlemez [2nd tergite] // id nr. 115595 HNHM Hym. coll..

Remarks. Móczár (1964b) designated the lectotype and synonymised *Holopyga similis* with *Ho. gloriosa chrysonota* (Förster, 1853). The specific name *Chrysis gloriosa* Fabricius (= *Ho. gloriosa* auctorum) was suppressed by ICZN (1998).

Current status. Holopyga chrysonota (Förster, 1853) (synonymised by Móczár 1964b).

Holopyga subtilis Mocsáry, 1914 (Plate 86A–86D)

Holopyga (Hedychridium) subtilis Mocsáry, 1914: 4.

Type locality. Uzbekistan: "Turkestania: Tashkend [= Tashkent], 19/IV. 1909 (Mus. Hung.)".

Holotype, \circlearrowleft : Tashkend 19.IV.09 // *subtilis* Mocs. typ. det. Mocsáry // Holotypus \circlearrowleft *Holopyga subtilis* Mocsáry (L.D. French) // id nr. 135045 HNHM Hym. coll..

Current status. Haba subtilis (Mocsáry, 1914) (transferred by Kimsey & Bohart 1991).

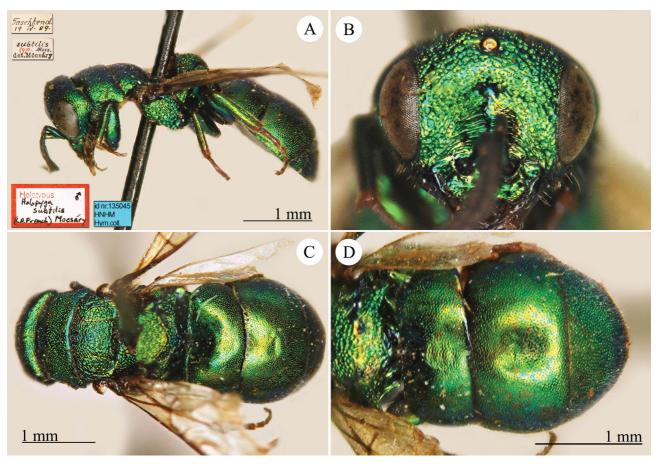


PLATE 86. *Holopyga subtilis* Mocsáry, 1914, holotype, ♂. **A**. Habitus, lateral view; **B**. Head, frontal view; **C**. Habitus, dorsal view; **D**. Metasoma, dorsal view.

Notozus pyrosomus purpureus Móczár, 1964

Notozus pyrosomus var. purpureus Móczár 1964a: 446.

Type locality. Hungary: Tiszasüly, 1-5. VIII. 1956, leg. Kaszab (Coll. Mus. Nat. Hung.)".

Holotype, ♀: Tiszasuly 1956.VIII.1-5. // leg. Kaszab // Holotypus ♀ *Not. pyrosomus* var. *purpureus* Móczár // id nr. 134885 HNHM Hym. coll..

Current status. Elampus pyrosomus (Förster, 1853) (transferred by Kimsey & Bohart 1991).

Notozus spinifemoris **Móczár, 1967** (Plate 87A–87F)

Notozus spinifemoris Móczár 1967a: 185.

Type locality. Mongolia: Mongolia, Uburchangaj aimak: Arc Bogd ul, ca. 20 km S von Somon Chovd, 1760 m, Exp. Dr. Z. Kaszab, 1964, 22.VI.1964.

Holotype, ♀: Mongolia, Uburchangaj aimak, Arc Bogd ul, cca 20 km S von somon Chovd, 1760m Exp. Dr. Z. Kaszab, 1964 // Nr. 170 22.VI.1964 // *Notozus* sp. nov. ♀ det. Móczár 965 // ♀ *Omalus* Pz. *Notozus panzeri* F. Linsenmaier det. 1964 // Holotypus ♀ *Notozus spinifemoris* L. Móczár 1966 // Hym. Typ. No. 87 Mus. Budapest // id nr. 134892 HNHM Hym. coll..

Current status. Elampus spinifemoris (Móczár, 1967) (transferred by Kimsey & Bohart 1991).

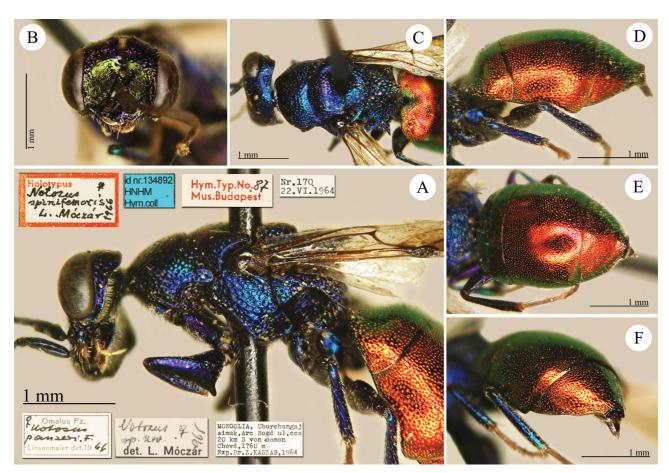


PLATE 87. *Notozus spinifemoris* Móczár, 1967, holotype ♀. **A**. Head and mesosoma, lateral view; **B**. Head, frontal view; **C**. Head and mesosoma, dorsal view; **D**. Metasoma, lateral view; **E**. Metasoma, dorsal view; **F**. Metasoma postero-lateral view.

Wollmannia concinna Mocsáry, 1909 (Plate 88A–88D)

Wollmannia concinna Mocsáry 1909: 2.

Type locality. Kazakhstan: "Baigakum, penes Djulek, 9.VI.1907. Specimen unicum".

Holotype, ♂: Baigakum bei Djulek Turkest. L. Wollmann / 9.VI.1907 // *concinna* Mocs. typ. det. Mocsáry // Holotypus ♂ *Wollmannia concinna* Mocsáry (L.D. French) // id nr. 134989 HNHM Hym. coll..

Current status. Hedychrum concinnum (Mocsáry, 1909) (transferred by Linsenmaier 1959a).

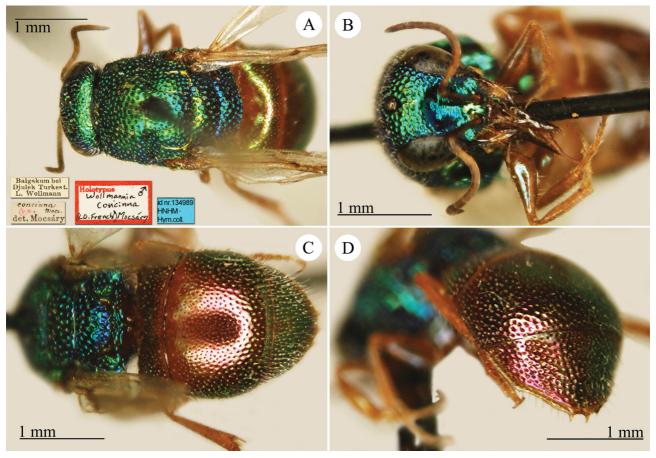


PLATE 88. Wollmannia concinna Mocsáry, 1909, holotype, &. A. Habitus, dorsal view; B. Head, frontal view; C. Mesos cutellum, metanotum, propodeum and metasoma, dorsal view; D. Metasoma, postero-lateral view.

Tribe Parnopini

Parnopes arabs Mocsáry, 1913

Parnopes arabs Mocsáry 1913a: 44.

Type locality. Yemen: "Arabia: Aden, 17/II. 1895, e collectione egregia C. T. Bingham (Mus. Hung.)".

Holotype, ♂: Aden Sheik Othman 17.2.1895 Yerbury // collect. Bingham // arabs Mocs. typ. det. Mocsáry // Parnopes denticulatus Spin. synonym. ... elegans Klug. Cephaloparnops Bisch. elegans Klug; arabs Mocsáry Trautmann [handwritten by Trautmann] // Holotypus Parnopes arabs Mocsáry LSK // id nr. 135680 HNHM Hym. coll...

Current status. Cephaloparnops denticulatus (Spinola, 1838) (synonymised and transferred by Kimsey & Bohart 1991).

Parnopes grandior fasciatus Mocsáry, 1889

Parnopes grandior var. fasciatus Mocsáry 1889: 615.

Type locality. Locality unknown. Mocsáry (1889) listed together the localities for *Parnopes grandior grandior* and its varieties. Based on type material, Budapest and Isazeg are in Hungary and N. Kikinda is in Serbia.

Lectotype, δ : 774-21 // Isaszeg // 1886 leg. Kuthy // Lectotypus *Parn. grandior* var. *fasciatus* Mocsáry <handwritten by Móczár> // id. nr. 135675 HNHM Hym. coll..

Paralectotypes, 1♂: 836-44 // small square green label // N. Kikinda // 1888 leg. Mocsáry // Paralectotypus *Parn. grandior* var. *fasciatus* Mocsáry <handwritten by Móczár> // id. nr. 135676 HNHM Hym. coll.; 1♂: Budapest Mocsáry // Paralectotypus *Parn. grandior* var. *fasciatus* Mocsáry <handwritten by Móczár> // id. nr. 135677 HNHM Hym. coll.; 1♂: Isaszeg július elején // Paralectotypus *Parn. grandior* var. *fasciatus* Mocsáry <handwritten by Móczár> // id. nr. 135678 HNHM Hym. coll.; 1♂: Budapest Emich // Paralectotypus *Parn. grandior* var. *fasciatus* Mocsáry <handwritten by Móczár> // id. nr. 135679 HNHM Hym. coll..

Remarks. Móczár (1964b: 447) designated the lectotype. *Parnopes grandior* var. *fasciatus* is a colour form of the typical species. Type damaged without right side wings.

Current status. Parnopes grandior (Pallas, 1771) (synonymised by Kimsey & Bohart 1991).

Parnopes schmiedeknechtii Mocsáry, 1899 (Plate 89A–89D)

Parnopes Schmiedeknechtii Mocsáry 1899: 493.

Type locality. Lebanon: "Syria (in monte Libanon ad Brummana Dr. O. Schmiedeknecht detexit)".

Lectotype, ♀: Brumana Libanon. / *Schmiedeknechti* (!) Mocs. typ. det. Mocsáry // red label // Lectotypus *Parnopes schmiedecknechti* (!) Mocsary desig. LS Kimsey // id nr. 135681 HNHM Hym. coll..

Paralectotype, 1♀: Brumana Libanon. // *Schmiedeknechti* (!) Mocs. typ. det. Mocsáry // red label // Paralectotypus *Parnopes schmiedecknechti* (!) Mocsary LS Kimsey // id nr. 135682 HNHM Hym. coll..

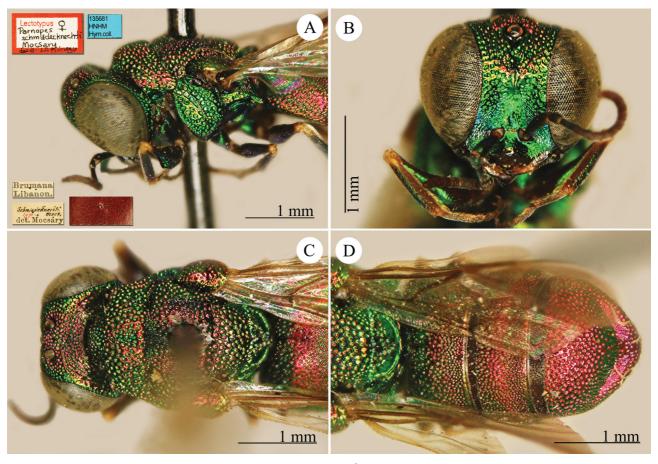


PLATE 89. *Parnopes schmiedeknechtii* Mocsáry, 1899, lectotype ♀. **A**. Head and mesosoma, lateral view; **B**. Head, frontal view; **C**. Head and mesosoma, dorsal view; **D**. Metasoma, dorsal view.

Remarks. Kimsey (1987b: 90) designated the lectotype. *Parnopes schmiedeknechtii* is the type-species of the genus *Isadelphus* Semenov, 1901 *nec* Förster, 1868, currently *Isadelphia* Semenow, 1902.

Current status. Isadelphia schmiedeknechtii (Mocsáry, 1899).

Specimens labelled as "type", but not part of type series

Chrysis (Holochrysis) picticornis Mocsáry, 1914

Remarks. *Chrysis picticornis* Mocsáry is a replacement name for *Ch. varicornis* Radoszkowski, 1877 *nec* Spinola, 1838. One specimen from Turkestania at HNHM is labelled "type" (id. nr. 135639 HNHM Hym. coll.), but it does not belong to the type series. Currently *Chrysura sulcata* (Dahlbom, 1845).

Chrysis (Holochrysis) separanda Mocsáry, 1890

Remarks. One specimen from Greece labelled "type" (id nr. 135636 HNHM Hym. coll.) does not belong to the type series. The syntype series from "Syra" is housed at Radoszkowski's collection in ISEA-PAN (Rosa *et al.* 2015e). Currently *Chrysura varicornis* (Spinola, 1838).

Chrysis (Tetrachrysis) chevrieri Mocsáry, 1879

Remarks. *Chrysis chevrieri* Mocsáry, 1879b is a replacement name for *Ch. comparata* Dahlbom, 1854 *nec* Lepeletier, 1806. All the specimens bearing the label "Typus *chevrieri*" consequently are not types. The type of *Ch. comparata* Dahlbom, 1854 are deposited at MRSN (Rosa & Xu 2015). Currently *Chrysis comparata* Lepeletier, 1806.

Chrysis (Tetrachrysis) chloris Mocsáry, 1889

Remarks. Two males and two females collected by Krüper at Poros are labelled "autotype" and they do not belong to the type series. The holotype, collected in Algeria, is housed in MHNG. Currently *Chrysis manicata* Dahlom, 1854.

Chrysis maracandensis Radoszkowski, 1877

Remarks. One specimen labelled as paratype (id nr. 115627 HNHM Hym. coll.) does not belong to the type series because it was collected at Astrabad, locality not mentioned in the original description. Another specimen in HNHM collected by Morawitz in Turkestan (labelled as type: id nr. 135303) does not belong to the type series and bears the label: *sec. spec. typ. Rad.* [secundum specimen typicum Radoszkowskii] <a href="https://doi.org/10.1001/journal.org/10.1

Chrysis (Tetrachrysis) taurica Mocsáry, 1889

Remarks. One female specimen from Turkey labelled "autotype" and does not belong to the type series. It bears the following labels: Asia minor // 868-27 // taurica Mocs. typ. det. Mocsáry // red label // *Chrysis taurica* Mocs. det. F. Strumia \mathcal{P} // id nr. 135162 HNHM Hym. coll. The holotype, collected in Tauria [Crimea] is deposited at Radoszkowski's collection in ISEA-PAN (Rosa *et al.* 2015e). Currently *Chrysis ragusae* De Stefani, 1888.

Cleptes chyzeri Mocsáry, 1889

Remarks. Mocsáry (1889: 50) replaced the name *Cleptes ignitus* Chevrier, 1862, *nom. preocc. nec* Fabricius (1787) with *Cleptes chyzeri* Mocsáry, 1889. Mocsáry's intent to replace Chevrier's name is clearly shown in the *Animadvesio*: "Speciem hanc eximiam iam ante annos novi et ita denominavi, ideoque hanc denominationem retinendam censui. A Clepte igneo Fabr. toto cælo differt." [= I already known this extraordinary species by years and I named it with this name [C. chyzeri] and therefore I decided to keep this name. It completely differs from *Cleptes igneus* Fabr.].

Móczár (1962: 119) designated the lectotype based on a female collected at Szóllőske and housed at HNHM, which is not a syntype, but one of the specimens listed by Mocsáry (1889) in its distributional range. The type series includes two specimens of Cl. ignitus Chevrier, 1862 collected at Geneva and housed in MHNG (ex coll. de Saussure) and examined by Mocsáry (1889). Therefore the specimen selected as lectotype has no type status (ICZN 1999: Article 74.2). It bears the following labels: Szóllőske 2.8.84 // Mocs. 153 // Chyzeri Mocs. Typ. det. Mocsáry // Lectotypus C. ♀ Chyzeri Mocsáry det. Móczár 1962 Hym. Typ. No. 3840 Mus. Budapest // Cleptes ♀ consimilis Buyss. det. Móczár 1995 // id nr. 134759 HNHM Hym. coll.. For the same reason all the specimens labelled as paralectotypes in HNHM collection by Móczár cannot be considered as paralectotypes: 12: Szóllőske 3.8.84 // Chyzeri Mocs. Typ. det. Mocsáry // Paralectotypus Cl. Chyzeri Mocsáry // Cleptes consimilis Móczár // Hym. Typ. No. 3841 Mus. Budapest // Cleptes ♀ consimilis Buyss. det. Móczár 1995 // syn. of Clept. splendidus F. ♀ det. Móczár, 1998 // id nr. 134756 HNHM Hym. coll.; 1♀: Hungaria septentrion // Paralectotypus Cl. Chyzeri Mocsáry // Cleptes consimilis Móczár // Hym. Typ. No. 3843 Mus. Budapest // Cleptes consimilis Buys. det. Móczár 1995 // id nr. 134757 HNHM Hym. coll.; 12: Szóllőske 16.7.87 // Cleptes chevrieri Frey det. Mocsáry // Paralectotypus Cl. Chyzeri Mocsáry // Cleptes consimilis Buys. det. Móczár // Hym. Typ. No. 3842 Mus. Budapest // Cleptes 🔾 consimilis Buyss, det. Móczár 1995 // id nr. 134758 HNHM Hym, coll. It belongs to the nitidulus species-group, included by Móczár (1997a) in the subgenus Leiocleptes. Currently C. splendidus (Fabricius, 1794) (synonymised by Móczár 1998b).

Cleptes fallax Mocsáry, 1889

Remarks. Mocsáry (1889: 49) described *Cleptes fallax* based on an unknown number of specimens from Sarepta and housed in de Saussure's collection. Móczár (1962: 119) designated the lectotype based on a male housed at HNHM, which is neither a syntype nor a lectotype (ICZN 1999: Article 74.2). The specimen selected by Móczár as the lectotype bears the following labels: Budapest Kuthy // fallax Mocs. typ. det. Mocsáry // Lectotype *Cleptes fallax* Mocsáry // *Cleptes nitidulus* F. det. Móczár 995 // Praep. Genit. Clept. N. 36 // Hym. Typ. No. 3847 Mus. Budapest // id nr. 134747 HNHM Hym. coll.. In the original description, only the locality Sarepta is mentioned whereas no specimens collected by Kuthy in Hungary are cited. One type of *Cl. fallax* Mocsáry collected at Sarepta is housed in MHNG (ex coll. de Saussure). *Cl. fallax* Mocsáry belongs to the *nitidulus* speciesgroup, included by Móczár (1997a) in the subgenus *Leiocleptes*. Currently *Cleptes nitidulus* (Fabricius, 1793) (synonymised by du Buysson 1891).

Cleptes radoszkowskii Mocsáry, 1889

Remarks. Mocsáry (in Radoszkowskii 1889: 7) described *Cleptes radoszkowskii* based on an unknown number of specimens collected in Caucasus by Mlokosewitz. One male at HNHM is labelled as allotype by Móczár, but it does not belong to the type series, because it was collected about 30 years after the description and therefore it has no type status. It is labelled: Astrakanovka S Mugan. ASSR 17.VI.27 leg. Bogarnikov [in Cyrillic] // *Cleptes radoszkowskii* Rad. & nov. det. Móczár, 1997 // Allotypus *Cl. radoszkowskii* Mócz. & nov. // St. Petersburg // Hym. Typ. No. 3873 Mus. Budapest // id nr. 134782 HNHM Hym. coll. The authorship of *Cl. radoszkowskii* is Mocsáry as reported in the original description (*Cl. Radoszkowskii* Mocs. (Inédite)). Currently *Cleptes radoszkowskii* Mocsáry, 1889.

Cleptes mocsaryi Semenov, 1891

Remarks. Semenov (1891: 184) described *Cleptes mocsaryi* on a specimen from Hungary. The holotype is deposited at ZISP; the female specimen housed in HNHM was compared with the type by Móczár and bears the following labels: Graecia Euboea // Typus Cl. Mocsáryi Semenov // nec Type! mocsáryi Sem. det. L. Móczár // compared with type, Móczár 1968 // id nr. 134800 HNHM Hym. coll. Currently *Cleptes mocsaryi* Semenov, 1891

Cleptes rugulosus Linsenmaier, 1968

Remarks. Linsenmaier (1968: 8) described *Cleptes rugulosus* based on a male collected in *Palästina*. The holotype is deposited at NMLS. The specimen housed in HNHM is labelled as allotype but it does not belong to the type series, because it was collected after the description. It is labelled: Szyria Mürzhofen // 531-3 // *Cleptes afer* det. Mocsáry // Allotypus *Cleptes rugulosus* & Linsenmaier det. Móczár 1995 // Hym. Typ. No.3871 Mus. Budapest // id. nr. 134779 HNHM Hym. coll. *Cl. rugulosus* was included by Móczár (1997a) in the subgenus *Leiocleptes* Móczár, 1962. Currently *Cleptes rugulosus* Linsenmaier, 1968

Cleptes saussurei Mocsáry, 1889

Cleptes semiauratus nigriventris du Buysson, 1898

Remarks. du Buysson (1898a) described *Cleptes semiauratus* var. *nigriventris nec* Dahlbom, 1845, based on a specimen collected at Barcelona from the collection of Cabrera. Some years later, Trautmann (1928) received few specimens of *Cl. semiauratus nigriventris* from A. Seyrig, collected at El Soldado (Cordoba), which he identified as *Cl. nigriventris* and raised this variation to species rank. Móczár (2000b: 316) designated the lectotype of *Cl. nigriventris sensu* Trautmann based on a specimen examined by Trautmann, which is not a type, because the type was collected at Barcelona by Cabrera (currently depository unknown). Therefore, the lectotype designation is invalid. The specimen bears the following labels: El Soldado (Cordoba) Seyrig /I coll. Trautmann // Zool. Mus. Berlin // *Cleptes nigriventris* Buyss <handwritten by Trautmann> // *Cleptes nigritus* \(\text{P Mercet det. L. Móczár, 1999 // Paralectotypus \(\text{Q C. nigriventris} \) det. Móczár [1]999 // Hym. Typ. No. 3872 // 134801 Hym. coll.

Móczár (2000b) placed *Cl. nigriventris* du Buysson in synonym of *Cl. nigritus* García Mercet, 1904, because *Cl. nigriventris* du Buysson is homonym of *Cl. nigriventris* Dahlbom, 1845. Currently *Heterocoelia nigriventris* (Bethylidae).

Cleptes sjostedti Hammer, 1950

Remarks. One female without type status labelled: C.P. Chusen June 1928 // 2301 // ex. sawfly cocoons // Suigen Korea // Cleptes ♀ sjostedti Hammer det. L. Móczár, 1994 <label marked with red> // id nr. 134788 Hym. coll.. Hammer (1950: 2) described Cleptes sjostedti based on two females: holotype and paratype. The holotype is housed in NHRS and the paratype in NHMW. Móczár (1998a: 341) designated the neotype of Cl. sjostedti in Hammer's collection in NHMW, but later the holotype was found in NHRS (Rosa & Vårdal 2015) and the neotype designation set aside. Currently Cleptes sjostedti Hammer, 1950.

Ellampus (Notozus) kohli Mocsáry, 1889

Remarks. Mocsáry (1889: 70) described *Ellampus* (*Notozus*) *kohli* based on a specimen from Austria housed in NHMW (*Tyrolis (Amras, ab amico Fr. Fr. Kohl detectus Mus. Caes. Vindob.!)*). The holotype is still housed in NHMW. In HNHM there is one specimen labelled: *Ellampus* (*Notozus*) *kohli* Mocs // Dr. Hensch Krapina Cro. // Neotypus & *Ell. Kohli* Mocsáry // id nr. 134886 HNHM Hym. coll. The neotype designation was not published but it was considered as a neotype in Kimsey & Bohart (1991). Currently *Elampus panzeri* (Fabricius, 1804) (synonymised by Zimmermann 1954 and transferred by Kimsey & Bohart 1991: 170).

Ellampus (Notozus) obesus Mocsáry, 1890

Remarks. One female specimen labelled as: Armenia Ross. Kulp // *Notozus* ♀ *obesus* Mocs. // Typus *obesus* Mocs. // red label // Not a type! det. LD French // id nr. 134893 HNHM Hym. coll.. It does not belong to the type series. The holotype, collected by König in Transcaspia, is deposited at Radoszkowski's collection in ISEA-PAN (Rosa *et al.* 2015e). Currently *Elampus obesus* Mocsáry, 1890.

Ellampus (Notozus) violascens Mocsáry, 1889

Remarks. Four specimens collected in Turkestan (id. nr. 134894 to 134897) do not belong to the type series, as already recognized by French, who labelled the specimens as "Not a type det. LD French. The holotype is deposited at Radoszkowski's collection in ISEA-PAN (Rosa *et al.* 2015e). Currently *Elampus violascens* Mocsáry, 1889.

Ellampus shokalskii Semenov, 1932

Remarks. One female was labelled by Linsenmaier as allotype, but it does not belong to the type series because collected after the description. It bears the labels: Mongolia: Chentej aimak 10 km W von Somon Delgerchaan, 1250m Exp. Dr. Z. Kaszab, 1965 // Nr. 476. 24.VIII.1965 // \bigcirc *Omalus* Pz. *shokalskii* Sem. Linsenmaier det. 1966 // Allotypus \bigcirc *Ellampus shokalskii* Semenov 1966 (!) // Hym. Typ. No. 88 Mus. Budapest / id nr. 134865 HNHM Hym. coll. Currently *Pseudomalus shokalskii* (Semenov, 1932).

Ellampus turkestanicus Mocsáry, 1889

Remarks. The holotype is deposited at Radoszkowski's collection in ISEA-PAN (Rosa *et al.* 2015e). The following specimens in HNHM are labelled as "autotype", and they do not belong to the original type series: 1\$\times\$: Kok-Dshigd // Turkestan Almásy // Typus *turkestanicus* Mocs. // Autotyp. // red label // Not a type ! det. LD French // id nr. 134857 HNHM Hym. coll. // *Pseudomalus turkestanicus* \$\times\$ Mocsary paralectotype; 1\$\times\$: Turkestan Almásy // Przewalsk // Typus *turkestanicus* Mocs. // Autotyp. // red label // Not a type ! det. LD French // id nr. 134858 HNHM Hym. coll. // prope *Pseudomalus pusillus bulgariensis* Lins. det. Strumia \$\times\$; 1\$\times\$: Turkestan // Typus *turkestanicus* Mocs. // Autotyp. // red label // Not a type ! det. LD French // id nr. 134859 HNHM Hym. coll. // \$\times\$ prope *Pseudomalus pusillus bulgariensis* Lins. det. Strumia; 1\$\times\$: Turkestan Almásy // Przewalsk // Typus *turkestanicus* Mocs. // Autotyp. // red label // Not a type ! det. LD French // bogdanovi <Móczár handwriting> // id nr. 134860 HNHM Hym. coll. // \$\times\$ prope *Pseudomalus pusillus bulgariensis* Lins. det. Strumia; 1\$\times\$: Turkestan // Typus *turkestanicus* Mocs. // Autotyp. // red label // Not a type ! det. LD French // id nr. 134861 HNHM Hym. coll. // \$\times\$ *Pseudomalus turkestanicus* Mocsary paralectotype; 1\$\times\$: Turkestan // Typus *turkestanicus* Mocs. // Autotyp. // red label // Not a type ! det. LD French // id nr. 134862 HNHM Hym. coll. // \$\times\$ *Pseudomalus turkestanicus* Mocsary Desirectotype. Currently *Pseudomalus turkestanicus* Mocsáry, 1889 (transferred by Kimsey & Bohart 1991).

Hedychrum viridiauratum Mocsáry, 1889

Remarks. One specimen from Algeria is labelled as "autotype" (id nr. 134942) and it is not part of the type series. Two syntypes from Algeria are housed in MHNG.

Holopyga generosa (Förster, 1853)

Remarks. One specimen labelled as: *Holop. generosa* Först. sec. spec. typ. <hadwritten by Mocsáry> // Sierre 15.7.84 [1884] Friese // *Holop. amoenula* Dhlb. det. Mocsáry // red label // id nr. 134911 HNHM Hym. coll. This specimen is not a syntype; it was collected after the original description. It was probably compared with a typical specimen from the Förster collection (*secundum specimen typicum*).

Holopyga sulcicollis Linsenmaier

Remarks. *Nomen* in collection. This species was never described. One male specimen labelled as: Mongolia, Uburchangaj aimak, Baga Bogd ul, zw. som. Bogd u. som. Baruun bajan-ulaan, 1900m Exp. Dr. Z. Kaszab, 1964 / *Holop. glor. chrys.* ? Först. // & Type *Holopyga* Dhlb. *sulcicollis* Lins. Linsenmaier det. 1964 // *Holop. chrysonota* Först. & det. L. Móczár // Nom in litt. von Linsenm. The description of *Holopyga sulcicollis* Linsenmaier was never published.

Final considerations

The Chrysididae collection housed at HNHM is undoubtedly one of the most important historical collections in the world with regard to the number of specimens and types (Kimsey & Bohart 1991). It is well conserved and over the years many experts studied the material preserved here (W. Arens, R.M. Bohart, R. du Buysson, L.D. French, L.S.

Kimsey, W. Linsenmaier, L. Móczár, O. Niehuis, V. Soon, F. Strumia, S. Zimmermann and others). As a consequence, some types have already been studied and their status and taxonomic evaluation were already discussed before. Even if the collection was already partly studied, the meticulous examination of all the specimens in collection has led to the discovery of 130 primary and secondary types (mostly syntypes and paralectotypes) not previously recorded and labelled as types. These types were not correctly identified because they were received in exchange by Mocsáry from various authors. At the same time, we noticed that about ninethy specimens labelled as types were actually without type status for different reasons and were considered as types because Mocsáry himself or subsequent curators added the following labels: "Allotype", "Autotype", "Cotype", "Idiotype", or generically "Type" (see definitions in Evenhuis 2008). Since many of these specimens have been considered as valid types in previous publications (e.g. Strumia & Fallahzadeh 2015), we here report these cases observed on specimens from around the world and not only related to Palaearctic specimens, to avoid future misunderstandings.

Both Linsenmaier and Móczár were used to designate "allotypes" based on specimens not included in the original description (Rosa *et al.* 2015b), collected many year after the descriptions and from different localities, therefore not belonging to the type series. These specimens have no type status. For example: *Ellampus shokalskii* Semenov, 1932; *Cleptes elegans* Mocsáry, 1901; *Cl. rugulosus* Linsenmaier, 1968 and *Cl. radoszkovskii* Mocsáry, 1889.

There are several specimens labelled as autotype (specimen designated by the author of a species subsequently and considered identical to the holotype, they have no type status). For example: *Ellampus turkestanicus* (Mocsáry, 1889); *Ellampus (Holophris) marginellus* (Mocsáry, 1890); *Ell. (Holophris) backeri* Mocsáry, 1913; *Hedychrum viridiauratum* Mocsáry, 1889; *Chrysis fallax* Mocsáry, 1889; *Ch. taurica* Mocsáry, 1889; *Ch. zuluana* Mocsáry, 1889 and *Ch. chloris* Mocsáry, 1889.

There are several specimens labelled as cotype, which sometimes have no type status. "Cotype" is an obsolete term used in the past to designate both a syntype or an autotype, depending on authors. In the Chrysididae, for example, A. Ducke was used to write "Cotype" on his labels both for syntypes and autotypes (Rosa 2009). For this reason, a careful examination of collecting data and supplementary data provided on labels and descriptions are needed to identify which one is the real syntype. In HNHM one specimen labelled by Ducke as "Cotype", but without type status is *Cleptes mutilloides* (Ducke, 1902). Other similar cases observed in HNHM are related to north American specimens sent by Aaron to Mocsáry. The following specimens labelled as "Cotype" actually belong to the type series: *Diplorrhos plicatus* Aaron, 1885; *Elampus variatus* Aaron, 1885; *Chrysis meta* Aaron, 1885; *Ch. nortoni* Aaron, 1885. Whereas, the following specimens labelled as "Cotype" have no type status: *Elampus coruscans* Norton, 1879; *El. viridis* Cresson, 1865; *Hedychrum sinuosus* Say, 1828; *He. dimidiata* Say, 1824; *He. ventrale* Say, 1824; *Omalus laeviventris* Cresson, 1865; *Notozus marginatus* Patton, 1879; *Chrysis coerulans* Fabricius, 1804; *Ch. lauta* Cresson, 1865; *Ch. tridens* Lepeletier & Serville, 1825; *Ch. vericalis* Patton, 1879 and *Ch. perpulchra* Cresson, 1865. Other cases of "Cotype" labels with syntype status are those of *Chrysis abuensis* Nurse, 1902 and *Ch. gujaratica* Nurse, 1903.

There are several specimens labelled as homotype (specimen compared with the type by someone who is not the original author, no type status). For example, *Chrysis brevicollis* Mocsáry, 1899 bears the label "Homotype RMB *Chrysis agilis* ♀ F.S. Smith". Within this category, can be included those specimens bearing the Latin label: "secundum specimen typicus", sometimes abbreviated in "sec. spec. typ.", or the label "compared with type". For example: *Cleptes mocsaryi* Semenov, 1891; *Cl. moczari* Linsenmaier, 1968; *Chrysis maracandensis* Radoszkowski, 1877; *Holopyga generosa* Förster, 1853. These specimens are often not conspecific with the type, as in the case of *Ellampus deauratus* Mocsáry, 1914. In HNHM there is one specimen bearing the labels: Tientsin [=Tianjin], 15.VI.1906, F.M. Thomson, 1907-200 // *Ellampus deauratus* Mocs. // compared with type G.M-W. [G. Meade-Waldo] // *Omalus deauratus* Mocs. // red label // id nr. 134853 HNHM Hym. coll. The holotype by monotypy of *Ellampus deauratus* is housed in BMNH and the specimen housed in HNHM, labelled as "compared with type" and later "type", does not belong to the type series and we found that belonged to an undescribed taxon, *Philoctetes simulator* Rosa, Notton & Xu, 2015 (Rosa *et al.* 2015d).

There are some specimens labelled as idiotype (specimen not from the type locality, and considered to be identical with the holotype by the original author). For example, *Cleptes saussurei* Mocsáry.

There are few specimens labelled as "type" but currently "names in collection", which means bearing a "type" label but their description was never published. For example *Holopyga diversicolor* Linsenmaier and *H. sulcicollis* Linsenmaier, bear the type labels, but they were never described.

Finally there are some species with name replaced by Mocsáry, which were erroneously considered as described by Mocsáry and consequently their specimens were labelled as "types". For some unknown reasons, specimens belonging to *Chrysis chevrieri* Mocsáry, 1879b (replacement name for *Ch. comparata* Dahlbom, 1854 nec Lepeletier, 1806) and *Ch. mucronifera* Mocsáry, 1889 (replacement name for *Ch. mucronata* Dahlbom, 1854 nec Brullé, 1846) have been labelled as types, but the types of *Ch. comparata* Dahlbom and *Ch. mucronata* Brullé are housed in Turin and Paris, respectively.

This catalogue is part of an ongoing research on the Palaearctic Chrysididae and their types (Rosa & Xu 2015; Rosa & Vårdal 2015; Rosa *et al.* 2015a, b, e). The research on type material is needed to clarify some taxonomic questions arisen during the study of Italian and European Fauna (Rosa & Soon 2012; Rosa & Xu 2015).

The current state of research on Palaearctic Chrysididae can be divided in two main areas: West Palaearctic (including Europe, North Africa and Near East) and East Palaearctic. West Palaearctic Chrysididae are well known (Linsenmaier 1999; Rosa & Soon 2012), but still some problems related to the interpretation of the oldest types are found (Rosa *et al.* 2015c). The new frontier for European chrysidid is the molecular systematic study, which already helped in the identification of new species (Paukkunen *et al.* 2015; Orlovskytė *et al.* 2016), separation of subspecies raised to species rank (Soon & Sarma 2011) and will clarify the systematic placement of several taxa still considered as subspecies by Linsenmaier (1959a, 1959b, 1968, 1987, 1987, 1997, 1999) (Mitroiu *et al.* 2015). On the other hand, Chrysididae from East Palaearctic are less known. Indeed, only few scattered data and descriptions are known for central Asian countries (Semenov & Nikol'skja 1954; Semenov 1954, 1967; Tarbinsky 2000, 2002a, b, c), Mongolia (Móczár 1967a), Russia (where the latest checklist dates back to Radoszkowski (1866)) and China (Rosa *et al.* 2014). In this sense, the study of the Asian types described by Mocsáry and deposited at HNHM is fundamental for the revision of cuckoo wasps from this area, because these types were not available for the publications of Semenov (1954, 1967) and Tarbinsky (2000, 2002a, b, c) and several new synonymies and different interpretations have been found (Rosa, Belokobylskij & Fedorova, in preparation).

Acknowledgements

We are grateful to Jutka Domonkos, Zsófia Papp, and Petra Szöllősi-Tóth for their help in finding literature and support in the study of the collection. We wish to thank Dr. Alexander V. Antropov (ZMMU, Russia), Dr. Marco Bernasconi (NMLS, Switzerland); Dr. Sergey Belokobylskij (ZISP, Russia); Dr. Roy Danielsson (LZM, Sweden); Dr. Frank Koch (MNHU, Germany); Dr. Bernard Merz (MHNG, Switzerland); Dr. Roberto Poggi (MSNG, Italy); Dr. Lars Bjørn Vilhelmsen (ZMU, Denmark), Dr. Bogdan Wiśniowski (ISEA-PAN, Poland), Dr. Dominique Zimmermann and Dr. Herbert Zettel (NHMW, Austria) for their cooperation and assistance in the study of type material and collections. We are also grateful to Liuba Fedorova (Bernareggio, Italy) for the translation of the Cyrillic labels; Werner Arens (Bad Hersfeld, Germany), Michael Madl (NHMW, Austria) and Dr. Villu Soon (Tartu, Estonia) for reviewing the manuscript and David Baldock (Milford, England) for proofreading the English text. We are also very grateful to Subject Editor Celso O. Azevedo and the two anonymous reviewers for their suggestions to improve the manuscript. The study was partly supported by the National Basic Research Program of China (No. 2013CB127600), the National Natural Science Foundation of China (No.30770265), and by SYNTHESYS Project http://www.synthesys.info/ which is financed by European Community Research Infrastructure Action under the FP7 "Capacities" Program" (HU-TAF-4013) (FR-TAF-5995).

References

Aaron, S.F. (1885) The North American Chrysididae. *Transactions of the American Entomological Society*, 12, 209–248. https://doi.org/10.2307/25076458

Abeille de Perrin, E. (1878) Diagnoses de Chrysides nouvelles. Published by the author, Marseille, 6 pp.

Abeille de Perrin, E. (1879) Synopsis critique et synonymique des Chrysides de France. *Annales de la Société Linnéenne de Lyon*, 26, 1–108.

Arens, W. (2001) Revision der Arten der *Chrysis dichroa*-Gruppe auf der Peloponnes mit Beschreibung dreier neuer Arten (Hymenoptera; Chrysididae). *Linzer biologische Beiträge*, 33 (2), 1157–1193.

Arens, W. (2014) Die Goldwespen der Peloponnes (Hymenoptera: Chrysididae) 1. Teil: Die Gattungen Cleptes, Omalus, Holopyga, Hedychrum, Hedychridium und Euchroeus; mit Beschreibung einer neuen Cleptes-Art. Linzer Biologische

- Beiträge, 46 (1), 553-621.
- Baldock, D. (2014) A provisional list of the wasps and bees of Mallorca, Balearic Islands, Spain (Hymenoptera: Chrysidoidea, Scolioidea, Vespoidea, Apoidea). *Entomofauna*, 35 (12), 217–288.
- Bálint, Z. (2002) Frivaldszky Imre. *In*: Bodó, S. & Viga, G. (Eds.), *Magyar Múzeumi Arcképcsarnok. [Portraits of Hungarian Museologists]*. Pulszky Társaság & Tarsoly Kiadó, Budapest, pp. i–xv + 1–984.
- Bálint, Z. & Abadjiev, S. (2006) An annotated list of Imre Frivaldszky's publications and the species-group and infraspecies names proposed by him for plants and animals (Regnum Plantare and Animale). *Annales historico-naturales Musei nationalis hungarici*, 98, 185–280.
- Balthasar, V. (1953 ["1951"]) Monographie des Chrysidides de Palestine et des pays limitrophes. *Acta Entomologica Musei Nationalis Prague*, 27 (Supplementum 2), 1–317.
- Balthasar, V. (1954) *Zlatěnky-Chrysidoidea* (Řád: Blanokřidli-Hymenoptera). *In: Fauna ČSR. Vol. 3*. Československá Akademie Věd, Praha, pp. 1–272.
- Barbosa, D.N. & Azevedo, C.O. (2014) *Moczariella*, a bizarre new genus of Mesitiinae (Hymenoptera, Bethylidae) from Arab Peninsula. *Zootaxa*, 3860 (3), 291–297. https://doi.org/10.11646/zootaxa.3860.3.7
- Berland, L. & Bernard, F. (1938) Hyménoptères vespiformes. III. (Cleptidae, Chrysidae, Trigonalidae). *In: Faune de France. Vol. 34*. Paul Lechevalier, Paris, pp. i–vii + 1–145.
- Bingham, C.T. (1903) *The fauna of British India*, *including Ceylon and Burma. Hymenoptera. Vol. 2. Ants and cuckoo-wasps*. Taylor & Francis, London, 506 pp., 1 pl.
- Bischoff, H. (1910) Die Chrysididen des Königlichen Zoologischen Museums zu Berlin. *Mitteilungen aus dem Zoologischen Museum in Berlin*, 4, 426–493.
- Bischoff, H. (1913) Hymenoptera. Fam. Chrysididae. *In*: Wytsman, P. (Ed.), *Genera insectorum. Fascicule 151*. L. Desmet-Verteneuil, Bruxelles, pp. 1–86 pp., 5 pls.
- Bohart, R.M. (1964) New species of *Chrysis* in the *lauta*, *propria* and *venusta* groups from North America. *Proceedings of the Biological Society of Washington*, 77, 223–236.
- Bohart, R.M. (1980) New genera and species of North American Chrysididae. (Hymenoptera). *Journal of the Kansas Entomological Society*, 53 (1), 132–136.
- Bohart, R.M. & Brumley, R.L. (1967) Two new species of *Hedychridium* from California. (Hymenoptera: Chrysididae). *Pan-Pacific Entomologist*, 43 (3), 232–235.
- Bohart, R.M. & Campos, L.E. (1960) A review of the genus *Omalus* Panzer in North America. (Hymenoptera, Chrysididae). *Annals of the Entomological Society of America*, 53 (2), 232–250. https://doi.org/10.1093/aesa/53.2.235
- Bohart, R.M. & French, L.D. (1986) Designation of chrysidid lectotypes in the Mocsáry Collection at the Hungarian National Museum, Budapest (Hymenoptera: Chrysididae). *Pan-Pacific Entomologist*, 62 (4), 340–343.
- Bohart, R.M. & Kimsey, L.S. (1978) A revision of the New World species of *Hedychridium* (Hymenoptera, Chrysididae). *Proceedings of the Biological Society of Washington*, 91 (3), 590–635.
- Bohart, R.M. & Kimsey, L.S. (1982) A synopsis of the Chrysididae in America North of Mexico. *Memoirs of the American Entomological Institute*, 33, 1–266.
- Brauns, H. (1903) Ein neues chrysiden-Genus aus der *Parnopes*-gruppe. *Annales historico-naturales Musei nationalis hungarici*, 1, 460–461.
- Brullé, A. (1846) Des Hyménopteres. *In*: Lepeletier de Saint-Fargeau, A. (Ed.), *Histoire Naturelles des Insectes. Tome Quatrieme*. Librairie De Ruret, Paris, pp. 1–680.
- Cameron, P. (1887) Descriptions of one new genus and some new species of parasitic Hymenoptera. *Proceedings of the Manchester Literary and Philosophical Society*, 26, 117–136.
- Cameron, P. (1888) Family Chrysididae. *In*: Cameron, P. (Ed.), *Biologia Centrali-Americana*. *Insecta*, *Hymenoptera (Families Tenthredinidae-Chrysididae)*. *Vol. 1*. R.H. Porter, London, pp. 1–487.
- Cameron, P. (1897) Hymenoptera orientalia, or contributions to a knowledge of the Hymenoptera of the Oriental Zoological Region. VI. *Proceedings of the Manchester Literary and Philosophical Society*, 41, 1–27.
- Chevrier, F. (1862) Description des Chrysides du Bassin du Léman. Imprimerie Ramboz et Schuchardt, Geneva, 134 pp.
- Csiki, E (1911) Különfélék [Mocsáry, A.]. Rovartani Lapok, 18, 27.
- Csiki, E. (1910) Mocsáry Sándor. Rovartani Lapok, 17, 162–175.
- Csiki, E. (1916) Mocsáry Sándor (1841–1915). Rovartani Lapok, 23 (1–2), 2–7.
- Curtis, J. (1824) British entomology: being illustrations and descriptions of the genera of insects found in Great Britain and Ireland: containing coloured figures from nature of the most rare and beautiful species, and in many instances of the plants upon which they are found. Vol. 4. Hymenoptera. Part 2. Privately published by the author, London, no pagination.
- Dahlbom, A.G. (1831) Exercitationes Hymenopterologicae. Monographia Chrysididum Sveciae (Familia Hymenopterorum Octava Latreille). Pars II, III (partim). Gothorum, Londini, 14 pp. & 16 pp. [Pars II: pp. 19–32, Pars III: 33–48, Chrysididae 33–36].
- Dahlbom, A.G. (1845) Dispositio Methodica Specierum Hymenopterorum, secundum Familias Insectorum Naturales. Particula secunda. Chrysis in sensu Linnæano. Berlingianis, Lund, 20 pp. https://doi.org/10.5962/bhl.title.66977

- Dahlbom, A.G. (1854) Hymenoptera Europaea praecipue borealia, formis typicis nonnullis specierum generumve exoticorum aut extraneorum propter nexum systematicum associatis, per familias, genera, species et varietates disposita atque descripta. 2. Chrysis in sensu Linnæano. Friedrich Nicolai, Berolini [= Berlin], xxiv + 412 pp. + 12 pls. https://doi.org/10.5962/bhl.title.15890
- Dalman, J.W. (1823) Analecta entomologica. Lindhians, Holmiae, 104 pp.
- De Stefani, T. (1888) Note sulle Crisididi di Sicilia. *Il Naturalista Siciliano*, 7, 88–95, 114–125, 139–145, 156–161, 177–182, 215–224, 273–291.
- du Buysson, R. (1887) Descriptions de Chrysidides nouvelles. Revue d'Entomologie (Caen), 6, 167-201.
- du Buysson, R. (1888) Descriptions de Chrysidides nouvelles. Revue d'Entomologie (Caen), 7, 1-13.
- du Buysson, R. (1891–1896) *Species des Hyménoptères d'Europe & d'Algerie. Tome Sixième*. Les Chrysides. Vve Dubosclard, Paris, XII + 746 (13–758) + 64 (unnumbered) pp., 32 pls. [(1891) 1–88, (1892) 89–208, (1893) 209–272, (1894) 273–400, (1895) 401–624, (1896) 625–756 + 1–22, (1891–1896) 64 unnumbered pages + 32 pls. (dating after Derksen & Scheiding 1963)]
 - https://doi.org/10.5962/bhl.title.10281
- du Buysson, R. (1898a) Contribution aux Chrysidides du Globe (3° serie). Revue d'Entomologie, 17 (5), 125-147, pl. 1.
- du Buysson, R. du (1898b ['1897']) Étude des Chrysidides du Muséum de Paris. *Annales de la Sociéte Entomologique de France*, 66 (4), 518–580.
- du Buysson, R. (1899) Catalogue des Insectes Hyménoptères de la famille des Chrysidides du Muséum de Paris. *Bulletin du Muséum National d'Histoire Naturelle Paris*, 5 (4), 159–169.
- du Buysson, R. (1900) Contribution aux Chrysidides du Globe. 4º Série. Revue d'Entomologie, 19 (7-10), 125-160, 2 pls.
- du Buysson, R. (1901) Sur quelques Chrysidides du Musée de Vienne. *Annalen des K. K. Naturhistorischen Hofmuseums in Wien*, 16 (1), 97–104.
- du Buysson, R. (1908) Hyménoptères nouveaux. Revue d'Entomologie, 27 (9), 207-219.
- Ducke, A. (1901) Beiträge zur Kenntnis der geographischen Verbreitung der Chrysididen und Beschreibung von drei neuen Arten. Zeitschrift für Systematische Hymenopterologie und Dipterologie, 1 (6), 353–361.
- Ducke, A. (1902a) Eine neue südamerikanische *Cleptes*-Art. *Zeitschrift für Systematische Hymenopterologie und Dipterologie*, 2 (2), 91–93.
- Ducke, A. (1902b) Neue südamerikanische Chrysididen (Hym.). Zeitschrift für Systematische Hymenopterologie und Dipterologie, 2 (2), 97–101.
- Ducke, A. (1902c) Ein wenig bekanntes Chrysididengenus *Amisega* Cam.. *Zeitschrift für Hymenopterologie und Dipterologie*, 2 (3), 141–144.
- Ducke, A. (1903) Neue südamerikanische Chrysididen (Hym.). Zeitschrift für Systematische Hymenopterologie und Dipterologie, 3 (3), 129–136.
- Ducke, A. (1907 ['1906']) Secondo supplemento alla revisione dei crisididi dello Stato Brasiliano del Pará. *Bollettino della Società entomologica italiana*, 38 (1–2), 3–19.
- Dufour, L. & Perris, E. (1840) Sur les Insectes Hyménoptères qui nichent dans l'intérieur des tiges sèches de la Ronce. *Annales de la Société Entomologique de France*, 9, 5–53.
- Evenhuis, N.L. (2008) Compendium of Zoological Type Nomenclature: a Reference Source. *Bishop Museum Technical Report*, 41, 1–23.
- Eversmann, E. (1858 ['1857']) Fauna Hymenopterologica Volgo-Uralensis. Continuatio. Familia Chrysidarum. *Bulletin de la Sociétè Imperiale des Naturalistes de Moscou*, 30, 544–567. https://doi.org/10.5962/bhl.title.67704
- Fabricius, J.C. (1781) Species insectorum, exhibentes eorum differentias specificas, synonyma auctorum, loca natalia, metamorphosin, adiectis observationibus, descriptionibus. Tomo I. C.E. Bohnii, Hamburgi et Kiloni, 522 + VIII pp.
- Fabricius, J.C. (1787) *Mantissa Insectorum sistens eorum species nuper detectas adiectis characteribus genericis, differentiis specificis, emendationibus, observationibus. Tomo I.* Impensis Christ. Gottl. Froft., Hafniae [= Copenhagen], xx + 348 pp. https://doi.org/10.5962/bhl.title.11657
- Fabricius, J.C. (1793) Entomologia systematica emendata et aucta secundum classes, ordines, genera, species adjectis synonimis, locis, observationibus, descriptionibus. Tomo II. C.G. Proft, Hafniae [= Copenhagen], viii + 519 pp. https://doi.org/10.5962/bhl.title.36532
- Fabricius, J.C. (1794) Entomologia systematica emendata et aucta secondum classes, ordines, genera, species adjectis synonimis, locis, observationibus, descriptionibus. Tomo IV. C.G. Proft, Hafniae [= Copenhagen], vii + 472 pp. https://doi.org/10.5962/bhl.title.36532
- Fabricius, J.C. (1804) Systema piezatorum secundum ordines, genera, species, adiectis synonymis, locis, observationibus, descriptionibus. Carolum Reichard, Brunsvigae [=Brunswick], iii–xiv, 439 + 30 pp. https://doi.org/10.5962/bhl.title.12548
- Forster, J.R. (1771) Novae species insectorum. Centuria I. T. Davies & B. White, London, VIII + 100 pp.
- Förster, A. (1853) Eine Centurie neuer Hymenopteren. Beschreibungen neuer Arten aus der Familie der Chrysididen. *Verhandlungen des naturhistorischen Vereins der preussischen Rheinlande und Westphalens*, 10, 266–362.
- Förster, A. (1868) Synopsis der Familien und Gattungen der Ichneumonen. Verhandlungen des naturhistorischen Vereins der preussischen Rheinlande und Westphalens, 25,135–221.

- García Mercet, R. (1904) Especies nuevas de crisídidos. *Boletín de la Real Sociedad Española de Historia Natural*, 4, 83–89. Generani, M., Pagliano G., Scaramozzino, P.L. & Strumia, F. (2002 ['2001']) Gli imenotteri delle isole di Capraia, Giglio, Gorgona, Pianosa e Montecristo (Arcipelago Toscano) (Insecta: Hymenoptera). *Frustula entomologica*, n.s., 24 (37), 51–
- González, J.A., Gayubo, S.F., Asís J.D. & Tormos J. (2009) Diversity and biogeographical significance of solitary wasps (Chrysididae, Eumeninae, and Spheciformes) at the Arribes del Duero Natural Park, Spain: their importance for insect diversity. Conservation in the Mediterranean Region. *Environmental Entomology*, 38 (3), 608–626. https://doi.org/10.1603/022.038.0312
- Guérin-Méneville, F.E. (1842) Description de quelques Chrysidides nouvelles. Revue Zoologique, 5 (5), 144-150.
- Hammer, A. (1950) Über einige von Kjell Kolthoff und anderen in China gesammelten Hymenoptera. Chrysididae, Cleptidae, Mutillidae. *Arkiv för Zoologie*, 42A (8), 1–12.
- Haris, A. (2016) Hymenoptera Research in the Carpathian Basin (Hymenoptera: Aculeata). Natura Somogyiensis, 29, 1–246.
- Horn, W. & Kahle, I. (1935–1937) Über entomologische Sammlungen, Entomologen und Entomo-Museologie (Ein Beitrag zur Geschichte der Entomologie). Teil I–III. *Entomologische Beihefte aus Berlin-Dahlem*, 2–4, VI + 1–160; 161–296; 297–536, Tavv. I–XVI; XVII–XXVI; XXVII–XXXVIII.
- International Commission on Zoological Nomenclature (ICZN) (1998) Opinion 1906. Euchroeus Latreille, 1809 (Insecta, Hymenoptera): conserved; *Chrysis purpurata* Fabricius, 1787 (currently *Euchroeus purpuratus*): specific name conserved; and *Chrysis gloriosa* Fabricius, 1793: specific name suppressed. *Bulletin of Zoological Nomenclature*, 55 (3), 194–196.
- International Commission on Zoological Nomenclature (ICZN) (1999) *International Code of Zoological Nomenclature.* 4th *Edition.* ITZN, London, XXX + 306 pp.
- Kimsey, L.S. (1986) Designation of chrysidid lectotypes. Pan-Pacific Entomologist, 62 (2), 105-110.
- Kimsey, L.S. (1987a) New genera and species of Neotropical Amiseginae (Hymenoptera, Chrysididae). Psyche, 94, 57-76.
- Kimsey, L.S. (1987b) Review of the Subfamily Parnopinae (Hymenoptera, Chrysididae). *Journal of the Kansas Entomlogical Society*, 60 (1), 83–91.
- Kimsey, L.S. & Bohart, R.M. (1991 ['1990']) The Chrysidid Wasps of the World. Oxford University Press, New York, 652 pp.
- Klug, F. (1845) Symbolae physicae seu icones et descriptiones insectorum quae ex itinere per Africam borealem et Asiam occidentalem Friderici Guilelmi Hemprich et Christiani Godofredi Ehrenberg medicinae et chirurgiae doctorum studio novae aut illustratae redierunt. Decas Quinta. Officina Academica, Berolini, 41 unnumbered pp., pls. 41–50.
- Krombein, K.V. (1960) Additions to the Amiseginae and Adelphinae (Hymenoptera, Chrysididae). *Transactions of the American Entomological Society*, 86 (1), 27–39.
- Kunz, P.X. (1994) Die Goldwespen (Chrysididae) Baden-Württembergs. Taxonomie, Bestimmung, Verbreitung, Kartierung und Ökologie. Mit einem Bestimmungsschlüssel für die deutschen Arten. Beihefte zu den Veröffentlichungen für Naturschutz und Landschaftspflege in Baden-Württemberg, 77, 1–188.
- Kutzscher, C. & Taeger, A. (1998) Portraits und biographische Daten. *In*: Taeger, A. & Blank, S.M. (Eds.), *Pflanzenwespen Deutschlands (Hymenoptera, Symphyta). Kommentierte Bestandsaufnahme.* Goecke & Evers, Keltern, 13–34.
- Lepeletier [de Saint Fargeau], [A.L.M.] (1806) Mémoire sur quelques espéces nouvelles d'insectes de la section des Hyménoptères appelés les Porte-tuyaux, et sur les caractères de cette famille et des genres qui la composent. *Annales du Muséum d'Histoire Naturelle*, 7, 115–129.
- Lepeletier de Saint Fargeau, A.L.M. & Audinet-Serville, J.G. (1825) *In*: Latreille, P.A. (Ed.), Encyclopédie méthodique ou par ordre des matières. *Histoire naturelle. Entomologie, ou histoire naturelle des crustacés, des arachnides et des insectes. Tome Dixième*. Veuve Agasse, Paris, pp. 1–832. (1825) & 1–344. [dates of publication after Shernborn & Woodward 1906]
- Linnaeus, C. (1758) Systema Naturae per Regna tria Naturae, secundum Classes, Ordines, Genera, Species, cum characteribus, differentiis, synonymis, locis. Editio Decima, Refurmata, Tomus I. Laurenti Salvii, Holmiae, 824 + IV pp. https://doi.org/10.5962/bhl.title.542
- Linnaeus, C. (1761) Fauna Suecia sistens Animalia Sueciae Regni: Mammalia, Aves, Amphibia, Pisces, Insecta, Vermes.

 Distributa per Classes et Ordines, enera et Species, cum Differentiis, Specierum, Synonymis, Auctorum, Nominibus Incolarum, Locis natalium, Descriptionibus Insectorum. Editio Altera, Auctior. Laurentius Salvius, Stockholm, 578 pp., 2 pls.
 - https://doi.org/10.5962/bhl.title.46380
- Linnaeus, C. (1767) Systema Naturae per Regna Tria Naturae, secundum Classes, Ordines, Genera, Species, cum characteribus, differentiis, synonymis, locis. Editio Duodecima, Reformata. Tom I. Pars II. Impensis Georg. Emanuel. Beer., Lipsiae, pp. 775 pp. [pp. 553–1327]
- Linsenmaier, W. (1951) Die europäischen Chrysididen (Hymenoptera). Versuch einer natürlichen Ordnung mit Diagnosen. *Mitteilungen der Schweizerischen Entomologischen Gesellschaft*, 24 (1), 1–110.
- Linsenmaier, W. (1959a) Revision der Familie Chrysididae (Hymenoptera) mit besonderer Berücksichtigung der europäischen Spezies. *Mitteilungen der Schweizerischen Entomologischen Gesellschaft*, 32 (1), 1–232.
- Linsenmaier, W. (1959b) Revision der Familie Chrysididae (Hymenoptera). Nachtrag. *Mitteilungen der Schweizerischen Entomologischen Gesellschaft*, 32 (2–3), 233–240.
- Linsenmaier, W. (1968) Revision der Familie Chrysididae (Hymenoptera). Zweiter Nachtrag. *Mitteilungen der Schweizerischen Entomologischen Gesellschaft*, 41 (1–4), 1–144.
- Linsenmaier, W. (1969) The chrysidid wasps of Palestine (Hym., Chrysididae). A faunistic catalogue with descriptions of new

- species and forms. Israel Journal of Entomology, 4, 343–375.
- Linsenmaier, W. (1987) Revision der Familie Chrysididae. (Hymenoptera). 4 Teil. *Mitteilungen der Schweizerischen Entomologischen Gesellschaft*, 60 (1–2), 133–158.
- Linsenmaier, W. (1994a) The Chrysididae (Insecta: Hymenoptera) of the Arabian Peninsula. Fauna of Saudi Arabia, 14, 145–206
- Linsenmaier, W. (1994b) Beiträge zu Cleptes Latreille, 1802. (Hymenoptera, Chrysididae). Entomofauna, 15 (45), 513-520.
- Linsenmaier, W. (1997) Altes und Neues von den Chrysididen. (Hymenoptera, Chrysididae). Entomofauna, 18 (19), 245-300.
- Linsenmaier, W. (1999) Die Goldwespen Nordafrikas (Hymenoptera, Chrysididae). Entomofauna, 10 (Supplement), 1–210.
- Lucas, P. H. (1849) Hyménoptères. *In*: Deshayes, G.P., Guichenot, A., Loche, V. & Lucas P.H. (Eds.), *Exploration scientifique de l'Algérie pendant les années 1840*, *1841*, *1842*. *Sciences physiques*. *Zoologie. III. Histoire naturelle des animaux articulés*. *Troisième partie. Insectes* (Suite). Imprimerie Nationale, Paris, 527 pp.
- Mader, L. (1939) Beitrage zur Kenntnis der Hymenopteren. III. Entomologisches Nachrichtenblatt, 13 (3-4), 93-110.
- Mingo, E. (1979) Sobre los Omalus Panz., 1804, de España (Hym., Chrysididae). Graellsia, 33, 199-219.
- Mingo, E. (1994) *Hymenoptera Chrysididae. Fauna Iberica. Vol. 6.* Museo Nacional de Ciencias Naturales, Consejo Superior de Investigaciones Científicas, Madrid, 256 pp.
- Mitroiu, M., Noyes, J., Cetkovic, A., Nonveiller, G., Radchenko, A., Polaszek, A., Ronquist, F., Forshage, M., Pagliano, G., Gusenleitner, J., Bartalucci, M., Olmi, M., Fusu, L., Madl, M., Johnson, N., Jansta, P., Wahis, R., Soon, V., Rosa, P., Osten, T., Barbier, Y. & de Jong, Y. (2015) Fauna Europaea: Hymenoptera-Apocrita (excl. Ichneumonoidea). *Biodiversity Data Journal*, 3 (e4186), 1–27.
 - https://doi.org/10.3897/BDJ.3.e4186
- Mocsáry, A. (1878) Data ad Faunam Hymenopterologicam Sibiriae. Tijdschrift voor Entomologie, 1878, 198–200.
- Mocsáry, A. (1879a) Hymenoptera nova e Fauna Hungarica. Természetrajzi Füzetek, 3, 115–141.
- Mocsáry, A. (1879b) Data caracteristica ad faunam Hymenopterologicam regionis Budapestinensis. *In: Topographia medicina et physica regionis Budapestinensis*, 1879, pp. 8–10.
- Mocsáry, A. (1882) Chrysididae Faunae Hungaricae. Hungarian Academy of Science, Budapest, 94 pp.
- Mocsáry, A. (1883) Hymenoptera nova europaea et exotica. Értekezések a Természettudományok Köréből, 13 (11), 1–72.
- Mocsáry, A. (1887a) Eine neue Goldwespen-Art und-Varietät aus Deutschland. Entomologische Nachrichten, 13 (19), 291.
- Mocsáry, A. (1887b) Studia Synonymica. Természetrajzi Füzetek, 11 (1), 12–17.
- Mocsáry, A. (1889) Monographia Chrysididarum Orbis Terrarum Universi. Hungarian Academy of Science, Budapest, 643 pp.
- Mocsáry, A. (1890) Additamentum primum ad monographiam Chrysididarum Orbis Terrarum Universi. *Természetrajzi Füzetek*, 13 (2–3), 45–66.
- Mocsáry, A. (1893 ['1892']) Additamentum secundum ad monographiam Chrysididarum Orbis Terrarum Universi. *Természetrajzi Füzetek*, 15 (4), 213–240.
- Mocsáry, A. (1896) Species hymenopterorum magnificae novae in collectione Musaei Nationalis Hungarici. *Természetrajzi Füzetek*, 19 (1), 1–8.
- Mocsáry, A. (1897) Hymenoptera nova e fauna Hungarica. Természetrajzi Füzetek, 20, 644-647.
- Mocsáry, A. (1899) Species Chrysididarum novae in collectione Musaei Nationalis Hungarici. *Természetrajzi Füzetek*, 22, 483–494.
- Mocsáry, A. (1902a) Species aliquot Chrysididarum novae. Természetrajzi Füzetek, 25 (1–2), 334–349.
- Mocsáry, A. (1902b) Chrysididae in Africa Meridionali a Dre. H. Brauns collectae et ab Alexadro Mocsáry recensitae. *Természetrajzi Füzetek*, 25 (3–4), 536–572.
- Mocsáry, A. (1904a) Chrysididae in Africa meridionali a Dr. H. Brauns collectae (Publicatio secunda). *Annales historico-naturales Musei nationalis hungarici.*, 2 (2), 403–413.
- Mocsáry, A. (1904b) Observatio de *Clepte aurora* Smith. *Annales historico-naturales Musei nationalis hungarici*, 2 (2), 567–569.
- Mocsáry, A. (1908a) Chrysididen von Madagaskar, den Comoren und Ostafrika. In: Voeltzkow A., Reisen in Ostafrika in den Jahren 1903–1905. *Wissenschaftliche Ergebnisse* 2, 259–263.
- Mocsáry, A. (1908b) Chrysididae in Africa Meridionali a Dr. H. Brauns collectae. (Publicatio tertia). *Annales historico-naturales Musei nationalis hungarici*, 6 (2), 505–526.
- Mocsáry, A. (1909) Chrysididae in Territorio Syr-Dariae a Leone Wollmann collectae. Archivum Zoologicum, 1 (1), 1–9.
- Mocsáry, A. (1911a) Insectorum messis in insula Creta a Lud. Biró congregate. II. Hymenoptera: Chrysididae. *Annales historico-naturales Musei nationalis hungarici*, 9 (1), 316–317.
- Mocsáry, A. (1911b) Species Chrysididarum novae. I. Annales historico-naturales Musei nationalis hungarici, 9 (2), 443-474.
- Mocsáry, A. (1912a) Species Chrysididarum novae. II. Annales historico-naturales Musei nationalis hungarici, 10 (2), 375–414.
- Mocsáry, A. (1912b) Species Chrysididarum novae. III. *Annales historico-naturales Musei nationalis hungarici*, 10 (3), 549–592.
- Mocsáry, A. (1912c) Hogyan lettern entomológus? Rovartani Lapok, 19, 81–113.
- Mocsáry, A. (1913a) Species Chrysididarum novae. IV. Annales historico-naturales Musei nationalis hungarici, 11 (1), 1–45.
- Mocsáry, A. (1913b) Chrysididae in insula Formosa a Joanne Sauter collectae. *Annales historico-naturales Musei nationalis hungarici*, 11, 612–619.

- Mocsáry, A. (1913c) The Chrysididae of the Philippine Islands. Philippine Journal of Science, 8 (D), 287–291.
- Mocsáry, A. (1914) Chrysididae plerumque exoticae novae. *Annales historico-naturales Musei nationalis hungarici*, 12 (1), 1–72.
- Mocsáry, A. & Szépligeti, V. (1901) Hymenopteren. *In*: Horváth, G. (Ed.), *Dritte Asiatische Forschungsreise des Grafen Eugen Zichy. Vol. 2. Zoologische Ergebnisse*. Hornyánszky/Hiersemann, Budapest/Leipzig, LXI + 472 pp.
- Móczár, L. (1946) Über einige seltene südliche Hymenopteren aus meinen Sammelausbeuten. *Folia entomologica hungarica*, 1, 27–28.
- Móczár, L. (1949) Les Cleptides du bassin des Karpathes (Fam. Cleptidae, Hym.). Folia entomologica hungarica, 3, 40-45.
- Móczár, L. (1951 ['1949']) Les Cleptides du Musée Hongrois d'Histoire Naturelle. *Annales historico-naturales Musei nationalis hungarici*, 42, 260–283.
- Móczár, L. (1961) On the habits of *Stilbum cyanurum cyanurum* Forst. (Hymenoptera, Chrysididae). *Annales historico-naturales Musei nationalis hungarici*, 53, 463–465.
- Móczár, L. (1962) Bemerkungen über einige *Cleptes*-Arten (Hymenoptera: Cleptidae). *Acta Zoologica Academiae Scientiarum Hungaricae*, 8, 115–125.
- Móczár, L. (1964a) Uber die *Notozus*-Arten Ungarns (Hymenoptera, Chrysididae). *Annales historico-naturales Musei nationalis hungarici*, 56, 439–447.
- Móczár, L. (1964b) Ergebnisse der Revision der Goldwespenfauna des Karpatenbeckens (Hymenoptera: Chrysididae). *Acta Zoologica Academiae Scientiarum Hungaricae*, 10, 433–450.
- Móczár, L. (1965) Weitere Ergebnisse der Revision der Goldwespenfauna des Karpatenbeckens (Hymenoptera, Genus: *Chrysis*). *Acta Zoologica Academiae Scientiarum Hungaricae*, 11, 168–180.
- Móczár, L. (1967a) Ergebnisse der zoologischen Forschungen von dr. Z. Kaszab in der Mongolei. 100. Chrysididae (Hymenoptera). *Acta Zoologica Academiae Scientiarum Hungaricae*, 13 (1–2), 183–190.
- Móczár, L. (1967b) Fémdarázsalkatúak-Chrysidoidea. Magyarország Állatvilága. Fauna Hungariae, XIII, 2. Akadémiai Kiadó, Budapest, 118 pp.
- Móczár, L. (1967c) Mocsáry Sándor és a Természettudományi Múzeum Hymenoptera Gyűjteménye. Állattani Közlemények, 54, 89–97.
- Móczár, L. (1968) Drei neue Cleptes-Arten (Hymenoptera). Acta Zoologica Academiae Scientiarum Hungaricae, 14 (1–2), 167–173.
- Móczár, L. (1984) The Chrysidoidea, Pompiloidea and Vespoidea fauna of the Hortobágy National Park (Hymenoptera). *In*: Mahunka, S. (Ed.), *The fauna of the Hortobágy National Park*. Akadémiai Kiadó, Budapest, pp. 353–359.
- Móczár, L. (1996a) Additions to American Cleptinae (Hymenoptera: Chrysididae). *In*: Norden, B.B. & Menke, A.S. (Eds.), Contribution on Hymenoptera and associated Insects dedicated to Karl V. Krombein. *Memoirs of the Entomological Society of Washington*, 17, 153–160.
- Móczár, L. (1996b) New data on the Subfamily Cleptinae (Hymenoptera: Chrysididae). *Acta Zoologica Academiae Scientiarum Hungaricae*, 42 (2), 133–144.
- Móczár, L. (1997a) Revision of the *Cleptes nitidulus* group of the world (Hymenoptera, Chrysididae, Cleptinae). *Entomofauna*, 18 (3), 25–44.
- Móczár, L. (1997b) Revision of *Cleptes (Leiocleptes)* species of the world (Hymenoptera: Chrysididae, Cleptinae). *Folia entomologica hungarica*, 58, 89–100.
- Móczár, L (1998a ['1997']) Revision of the *Cleptes (Holcocleptes)* species of the world (Hymenoptera, Chrysididae). *Acta Zoologica Academiae Scientiarum Hungaricae*, 43 (4), 323–343.
- Móczár, L. (1998b) Supplement to the revision of *Cleptes (Leiocleptes)* of the world (Hymenoptera: Chrysididae, Cleptinae). *Folia entomologica hungarica*, 59, 209–211.
- Móczár, L. (1998c) Revision of the Cleptinae of the World. Genus *Cleptes* subgenera and species groups. (Hymenoptera, Chrysididae). *Entomofauna*, 19 (31), 501–516.
- Móczár, L. (2000a) Revision of the *Cleptes asianus* and *townesi* groups of the world (Hymenoptera, Chrysididae, Cleptinae). *Acta Zoologica Academiae Scientiarum Hungaricae*, 46 (4), 319–331.
- Móczár, L. (2000b) World revision of the *Cleptes satoi* group (Hymenoptera: Chrysididae, Cleptinae). *Annales historico-naturales Musei nationalis hungarici*, 92, 297–324.
- Móczár, L. (2001) World revision of the *Cleptes semiauratus* group (Hymenoptera, Chrysididae, Cleptinae). *Linzer biologische Beiträge*, 33 (1), 905–931.
- Móczár, L. (2009) Cleptes hungaricus sp. n. and the related Palaearctic species (Hymenoptera: Chrysididae). Annales historico-naturales Musei nationalis hungarici, 101, 131–136.
- Moore, C.G. (1966) Taxonomy of the *coerulans* group of the genus *Chrysis* in North America. *Annals of the Entomological Society of America*, 59, 1125–1131. https://doi.org/10.1093/aesa/59.6.1125
- Morice, F.D. (1909) A list of chrysidids taken by the writer in two visits to Jaffa, Jerusalem and Jericho, with descriptions of new species. *Transactions of the Royal Entomological Society of London*, 57, 465–469. https://doi.org/10.1111/j.1365-2311.1909.tb02181.x
- Musgrave, A. (1932) *Bibliography of Australian Entomology 1775–1930: with Biographical Notes on Authors and Collectors.* The Society, Sydney, 380 pp.

- Niehuis, O. (1998) *Hedychridium wahisi*, sp. n., a new cuckoo wasp from Italy (Hymenoptera: Chrysididae). *Beiträge zur Entomologie*, 48 (2), 525–530.
- Niehuis, O. (2001) Chrysididae. In: Dathe, H.H., Taeger, A. & Blank, S.M. (Eds.), Verzeichnis der Hautflügler Deutschlands (Entomofauna Germanica, 4). Entomologische Nachrichten und Berichte, 7, pp. 119–123.
- Nikol'skaya, M.N. (1978) Chrysidoidea. *In:* Medvedev, G.S. (Ed.), *Opredelitel' Nasekomykh Evropeiskoi Chasti SSSR* [Key to the insects of the European part of the USSR]. 3 (1). Nauka, Leningrad, pp. 58–71. [in Russian]
- Norton, E. (1879) On the chrysides of North America. *Transaction of the American Entomological Society*, 7, 233–242. https://doi.org/10.2307/25076375
- Nurse, G.G. (1902) New species of Indian Chrysididae. The Entomologist, 35, 304–308.
- Nurse, C.G. (1903a) New species of Indian Chrysididae. *The Entomologist*, 36, 10–12.
- Nurse, C.G. (1903b) New species of Indian Chrysididae. The Entomologist, 36, 40–42.
- Okáli, I., Országh, I., Matoušek, B. & Hrabovec, I. (1996) Slovník slovenských zoológov a zoológov so vzťahmi k územiu Slovenska. Stimul, Bratislava, 137 pp.
- Orlovskytė, S., Budrienė, A. & Budrys, E. (2010) Check-list of cuckoo-wasps (Hymenoptera: Chrysididae) of Lithuania. *New and rare for Lithuania insect species*, 22, 141–156.
- Orlovskytė, S., Budrys, E., Budriene, A., Radzevičiūte, R. & Soon, V. (2016) Sibling species in the *Chrysis ignita* complex: molecular, morphological and trophic differentiation of Baltic species, with a description of two new cryptic species (Hymenoptera: Chrysididae). *Systematic Entomology*, 41 (4), 771–793. https://doi.org/10.1111/syen.12190
- Pallas, P.S. (1771) Reise durch verschiedene Provinzen des Russischen Reichs. Erster Theil. Kayserlichen Akademie der Wissenschaften, St. Petersburg, [10] + 502 pp. (pp. 3–504), 11 pls.
- Panzer, G.W.F. (1798) Faunae Insectorum Germaniae initia, oder, Deutschlands Insecten. 4 (49–60) & 7 (80–83). Felseckerschen Buchhandlung, Nürnberg, 24 pp. & 24 pp. [dating after Sherborn, 1923] https://doi.org/10.5962/bhl.title.15007
- Papp, J. (2002) Mocsáry Sándor. *In*: Bodó, S. & Viga, G. (Eds.), *Magyar múzeumi arcképcsarnok*. Pulszky Társaság, Tarsoly Kiadó, Budapest, 880 pp.
- Patton, W.H. (1879) Descriptions of several new Proctotrupidae and Chrysididae. *Canadian Entomologist*, 11, 64–68. https://doi.org/10.4039/ent1164-4
- Paukkunen, J., Berg, A., Soon, V., Ødegaard, F. & Rosa, P. (2015) An illustrated key to the cuckoo wasps (Hymenoptera, Chrysididae) of the Nordic and Baltic countries, with description of a new species. *ZooKeys*, 548, 1–116. https://doi.org/10.3897/zookeys.548.6164
- Paukkunen, J., Rosa, P., Soon, V., Johansson, N. & Ødegaard, F. (2014) Faunistic review of the cuckoo wasps of Fennoscandia, Denmark and the Baltic countries (Hymenoptera: Chrysididae). *Zootaxa*, 3864 (1), 1–67. https://doi.org/10.11646/zootaxa.3864.1.1
- Pavesi, M. & Rosa, P. (2013) La collezione di Crisidi (Hymenoptera, Chrysididae) del Museo Civico di Storia Naturale di Verona. *Bollettino del Museo civico di Storia naturale di Verona*, 37, 47–66.
- Radoszkowski, O. (1866) Enumération des espèces de Chrysides de Russie. *Horae Societatis Entomologicae Rossicae*, 3, 295–310.
- Radoszkowski, O. (1876) Comte-rendu des Hyménopteres recueillis en Egypte et Abyssinie en 1873. *Horae Societatis Entomologicae Rossicae*, 12 (1 & 2), 111–116 & 117–150.
- Radoszkowski, O. (1877) *Chrysidiformes, Mutillidae et Sphegidae. In*: Putieshestvie v Turkestan A.P. Fedtshenko [*Voyage au Turkestan d'Alexis Fedtschenko*], Series 14, 2 (5), pp. 1–87, 8 pls. [in Russian and Latin]
- Radoszkovski, O. (1880 ['1879']) Les Chrysides et Sphégides du Caucase. *Horae Societatis Entomologicae Rossicae*, 15, 140–156
- Radoszkowski, O (1887) Insecta in itinere Cl. N. Przewalskii in Asia Centrali novissime lecta. *Horae Societatis Entomologicae Rossicae*, 21, 41–51, 2 pls.
- Radoszkowski, O. (1889 ['1888']) Révision des armures copulatrices des mâles de la tribu des Chrysides. *Horae Societatis Entomologicae Rossicae*, 23 (1–2), 3–40, 6 pls.
- Radoszkowski, O. (1890 ['1889']) Hyménopteres recoltés sur le mont Ararat. *Horae Societatis Entomologicae Rossicae*, 24, 502–510.
- Radoszkowski, O. (1891) Descriptions de Chrysides nouvelles. Revue d'Entomologie, 10, 183-198.
- Riek, E.F. (1955) Australian cleptid (Hymenoptera: Chrysidoidea) egg parasites of Cresmododea (Phasmodea). *Australian Journal of Zoology*, 3, 118–130. https://doi.org/10.1071/zo9550118
- Rosa, P. (2005) La collezione di Crisidi (Hymenoptera, Chrysididae) del Museo Civico di Storia Naturale di Milano. *Natura*, 94 (2), 1–128 pp.
- Rosa, P. (2006) I Crisidi della Valle d'Aosta. Monografie del Museo regionale di Scienze naturali. Vol. 6. St.-Pierre, Aosta, 368 pp., xvi + xxxii pls.
- Rosa, P. (2009) Catalogo dei tipi dei Crisidi del Museo Civico di Storia Naturale "G. Doria" di Genova (Hymenoptera, Chrysididae). *Annali del Museo civico di Storia naturale Giacomo Doria*, 100, 209–272.
- Rosa, P. & Soon, V. (2012) Hymenoptera: Chrysididae. Fauna Europaea version 2.5. Available from: http://www.faunaeur.org

- (accessed 31 December 2014)
- Rosa, P. & Vårdal, H. (2015) An annotated catalogue of the types of Chrysididae (Hymenoptera) at the Swedish Museum of Natural History, Stockholm, with brief historical notes. *ZooKeys*, 495, 79–132. https://doi.org/10.3897/zookeys.495.9356
- Rosa, P. & Xu Z-f. (2015) Annotated type catalogue of the Chrysididae (Insecta, Hymenoptera) deposited in the collection of Maximilian Spinola (1780–1857), Turin. *ZooKeys*, 471, 1–96. https://doi.org/10.3897/zookeys.471.6558
- Rosa, P., Antropov, A. & Xu, Z.-F. (2015a) A catalogue of the Chrysididae (Insecta, Hymenoptera) types deposited in the Zoological Museum, Moscow Lomonosov State University, Russia. *Zootaxa*, 3990 (1), 1–31. https://doi.org/10.11646/zootaxa.3990.1.1
- Rosa, P., Bernasconi, M.V. & Wyniger, D. (2015b) The Linsenmaier Chrysididae collection housed in the Natur-Museum Luzern (Switzerland) and the main results of the related GBIF Hymenoptera Project (Insecta). *Zootaxa* 3986 (5), 501–548. https://doi.org/10.11646/zootaxa.3986.5.1
- Rosa, P., Forshage, M., Paukkunen, J. & Soon, V. (2015c) Cleptes pallipes Lepeletier synonym of Cleptes semiauratus (Linnaeus) and description of Cleptes striatipleuris sp. nov. (Hymenoptera: Chrysididae, Cleptinae). Zootaxa, 4039 (4), 543–552.
 - https://doi.org/10.11646/zootaxa.4039.4.4
- Rosa, P., Lotfalizadeh, H. & Pourrafei, L. (2013) First checklist of the chrysidid wasps (Hymenoptera: Chrysididae) of Iran. *Zootaxa*, 3700 (1), 1–47.
 - https://doi.org/10.11646/zootaxa.3700.1.1
- Rosa, P., Wei, N.-S., Feng, J. & Xu, Z.-F. (2016) Revision of the genus *Trichrysis* Lichtenstein, 1876 from China, with description of three new species (Hymenoptera, Chrysididae). *Deutsche Entomologische Zeitschrift*, 63 (1), 109–136. https://doi.org/10.3897/dez.63.7347
- Rosa, P., Wei, N.-S., Notton, D. & Xu, Z.-F. (2015d) The genus *Philoctetes* Abeille de Perrin, 1879 from China, with description of two new species (Hymenoptera, Chrysididae). *Zootaxa*, 4040 (4), 433–444. https://doi.org/10.11646/zootaxa.4040.4.3
- Rosa, P., Wei, N.-S. & Xu, Z.-F. (2014) An annotated checklist of the chrysidid wasps (Hymenoptera, Chrysididae) from China. *ZooKeys*, 455, 1–128.
 - https://doi.org/10.3897/zookeys.455.6557
- Rosa, P., Wiśniowski, B. & Xu, Z.-F. (2015e) Annotated type catalogue of the Chrysididae (Insecta, Hymenoptera) deposited in the collection of Radoszkowski in the Polish Academy of Sciences, Kraków. *ZooKeys*, 486, 1–100. https://doi.org/10.3897/zookeys.486.8753
- Rossi, P. (1790) Fauna etrusca sistens Insecta quae in provinciis Florentina et Pisana praesertim collegit. Tomus secundus. Thomae Masi et Sociorum, Liburni [= Livorno], 348 pp., 10 pls.
- Say, T. (1824) Natural History. *In*: Keating, W.H. (Ed.), *Narrative of expedition to the source of St. Peter's River*, etc. Vol. 2. *Appendix Part 1.* Carey, H.C. & Lea, I., Philadelphia, pp. 253–459.
- Say, T. (1828) Descriptions of new species of Hymenoptera of the United States. *Contributions of the Maclurian Lyceum to the Arts and Sciences*, 1, 67–83.
- Schljachtenok, A.S. (2006) Zur Kenntnis der Goldwespen Weissrusslands (Hymenoptera, Chrysididae). *Entomofauna*, 27 (23), 285–292.
- Schmid-Egger, C. (2010) Hymenoptera Aculeata from "Parc national du Mercantour" (France) and "Parco delle Alpi Marittime" (Italy) in the south-western Alps. *Ampulex*, 3, 13–50.
- Schmid-Egger, C., Risch, S. & Niehuis, O. (1995) Die Wildbienen und Wespen von Rheinland-Pfalz. Verbreitung, Ökologie und Gefährdungssituation. *Fauna Flora Rheinland-Pfalz*, 16, 1–296.
- Schneider, N. (2006) Abeilles et guêpes anthropophiles du Luxembourg (Insecta, Hymenoptera, Aculeata). *Bulletin de la Société des naturalistes luxembourgeois*, 107, 131–145.
- Scopoli, J.A. (1763) Entomologia Carniolica exhibens Insecta Carnioliae indigena et distributa in ordines, genera, species, varietates, Methodo Linneana. Vindobonae [= Vienna], 420 + xxxii pp. https://doi.org/10.5962/bhl.title.34434
- Semenov, A. (1892['1891']) Revisio Hymenopterorum Musei Zoologici Academiae Caesareae Scientiarum Petropolitanae. 1. Genus Cleptes Latr. Mélanges Biologiques, 13 (2), 179–186. [= Bulletin de l'Académie impériale des Sciences de St.-Pétersbourg, New Series, (2) 34, 497–504]
- Semenov, A. (1901) Chrysididarum species novae vel parum cognitae. Russkoe Entomologicheckoe obozrenie [Russian Entomological Review], 1, 23–27.
- Semenov, A. & Nikol'skaya, M.N. (1954) see Semenov-Tian-Shanskij, A. & Nikol'skaya, M.N. (1954)
- Semenov-Tian-Shanskij, A. (1910 ['1909']) Chrysididarum species novae vel parum cognitae (Hymenoptera). IV. *Russkoe Entomologicheckoe obozrenie* [*Russian Entomological Review*], 9, 213–226.
- Semenov-Tian-Shanskij, A. (1912) Chrysididarum species novae vel parum cognitae (Hymenoptera). V. *Russkoe Entomologicheckoe obozrenie* [Russian Entomological Review], 12 (2), 177–201.
- Semenov-Tian-Shanskij, A. (1920) Revisio synoptica Cleptidarum faunae rossicae (Hymenoptera Proctotrypodea). *Bulletin de l'Académie Impériale des Sciences de St. Pétersbourg*, 1920, 303–328.

- Semenov-Tian-Shanskij, A. (1932) Supplementa ad Chrysididarum monographias ab A.G. Dahlbom (1854), A. Mocsáry (1889), R. du Buysson (1896) et H. Bischoff (1913) editas. I. *Horae Societatis Entomologicae Rossicae*, 42 (3), 1–48.
- Semenov-Tian-Shanskij, A. (1954) [Classification of the tribe Hedychrini Mocs. (Hymenoptera, Chrysididae) and description of new species]. *Trudy Zoologicheskogo Instituta Akademii Nauk SSSR*, 15, 138–145. [in Russian]
- Semenov-Tian-Shanskij, A. (1967) [New species of gold wasps (Hymenoptera, Chrysididae)]. *Trudy Zoologicheskogo Instituta Akademii Nauk SSSR*, 43, 118–184. [in Russian]
- Semenov-Tian-Shanskij, A. & Nikol'skaya, M.N. (1954) [Cuckoo-wasps (Hymenoptera, Chrysididae) of Tajikistan]. *Trudy Zoologichescogo Instituta Akademiy Nauk SSSR*, 15, 89–137. [in Russian]
- Semenow, A. (1902). Generica quaedam nomina mutanda vel emendata. *Russkoe Entomologicheckoe obozrenie [Russian Entomological Review*], 2, 353.
- Shuckard, W.E. (1837) Description of the genera and species of the British Chrysididae. *The Entomological magazine*, 4, 156–177.
- Soldanski, H. (1916) Aus der entomologischen Welt. *Deutsche Entomologische Zeitschrift*, 1, 87–89. https://doi.org/10.1002/mmnd.48019160114
- Soon, V. & Sarma, U. (2011) Mitochondrial phylogeny of the *Chrysis ignita* (Hymenoptera: Chrysididae) species group based on simultaneous Bayesian alignment and phylogeny reconstruction. *Molecular Phylogenetics and Evolution*, 60, 13–20. https://doi.org/10.1016/j.ympev.2011.04.005
- Soon, V., Budrys, E., Orlovskytė, S., Paukkunen, J., Ødegaard, F., Ljubomirov, T. & Saarma, U. (2014) Testing the validity of Northern European species in the *Chrysis ignita* species group (Hymenoptera: Chrysididae) with DNA Barcoding. *Zootaxa*, 3786 (3), 301–330. https://doi.org/10.11646/zootaxa.3786.3.4
- Spinola, M. (1808) Insectorum Liguriae species novae aut rariores quas in agro Ligustico nuper detexit, descripsit et iconibus illustravit Maximilianus Spinola, adjecto catalogo specierum auctoribus jam enumeratarum, quae in eadem regione passim occurrunt. Vol. 3. Gravier Yves, Genuae [= Genoa], 180 pp. (pp. 83–262) + 5 pls. [dating after Passerin d'Entrèves 1983].
- Spinola, M. (1838) Comte rendu des Hyménoptères recueillis par M. Fischer pendant son voyage en Égypte, et communiqués par M. le docteur Waltl a Maximilien Spinola. *Annales de la Société Entomologique de France*, 7, 437–457.
- Strumia, F. (1995 ['1994']) Hymenoptera Chrysididae. *In*: Minelli, A., Ruffo, S. & La Posta, S. (Eds.), *Checklist delle specie della fauna italiana*. *Vol. 99*. Editione Calderini, Bologna, pp. 1–10.
- Strumia, F. (1996) Un nuovo *Pseudomalus* d'Italia, Corsica e Grecia (Hymenoptera Chrysididae). *Bollettino della Società entomologica italiana*, 127 (3), 243–250.
- Strumia, F. (2004) Lectotype designation of *Hedychridium virescens* Buysson, 1908, male description of *Cleptes juengeri* Linsenmaier, 1994 and of the female of *C. triestensis* Moczar, 2000 (Hymenoptera, Chrysididae). *Bollettino del Museo regionale di Scienze naturali Torino*, 21 (2), 475–486.
- Strumia, F. (2007 ['2005–2006']) Gli imenotteri crisididi dell'isola di Creta (Hymenoptera Chrysididae). *Frustula entomologica*, New Series, 28–29, 97–109.
- Strumia, F. (2009) Trichrysis baratzsensis sp. nov. (Hymenoptera: Chrysididae) from Sardinia. Zootaxa, 2318, 589-595.
- Strumia, F. (2012) To the knowledge of *Hedychridium* Abeille de Perrin, 1879 (Hymenoptera: Chrysididae) of Mediterranean Region, with description of new species and new synonymy. *Zootaxa*, 3548, 65–68.
- Strumia, F. & Fallahzadeh, M. (2015) New records and three new species of Chrysididae (Hymenoptera, Chrysidoidea) from Iran. *Journal of Insect Biodiversity*, 3 (15), 1–32. https://doi.org/10.12976/jib/2015.3.15
- Strumia, F. & Gayubo, S.F. (2013) To the knowledge of cuckoo wasps (Hymenoptera: Chrysididae) of the Balearic Archipelago, Spain. *Zootaxa*, 3694 (5), 471–485. https://doi.org/10.11646/zootaxa.3694.5.5
- Strumia, F. & Yildirim, E. (2009 ['2007']) Contribution to the knowledge of Chrysididae Faunae of Turkey (Hymenoptera, Aculeata). *Frustula Entomologica*, n.s., 30 (43), 55–92.
- Strumia, F. & Yildirim, E. (2012 ['2010–2011']) The present situation of the Chrysididae fauna (Hymenoptera, Aculeata) of Turkey. *Frustula Entomologica*, n.s., 33 (46), 1–21.
- Szczepko, K., Kruk, A., Bartos, M. & Wiśniowski, B. (2013). Factors influencing the diversity of cuckoo wasps (Hymenoptera: Chrysididae) in the post-agriculture area of the Kampinos National Park, Poland. *Insect Conservation and Diversity*, 6 (3), 339–353.
 - https://doi.org/10.1111/j.1752-4598.2012.00223.x
- Szelei, L. (1971) Mocsáry Sándor. *Tudomány és mezőgazdaság*, 9, 97–99.
- Tanács, L. (2014) A 100 éves dr. Móczár László professzor úr köszöntése és szakmai életútjának ismertetése [Celebration of Prof. dr. László Móczár's 100th birthday, and a short summary of his activities]. *Állattani Közlemények*, 99, 61–68.
- Tarbinsky, Yu. S. (2000) [The golden wasp genus *Chrysis* (gr. *ignita*) (Hymenoptera, Chrysididae) in Tien Shan and adjacent territories]. *Tethys Entomological Research*, 2, 193–204. [in Russian]
- Tarbinsky, Yu. S. (2002a) [The golden wasp genus *Chrysis* L. (Hymenoptera, Chrysididae) in Tien Shan and adjacent territories. II. Species groups *succincta*, *leachii*, *cerastens* (!), *taczanovskii*, *pallidicornis*, *smaragdula*, *elegans*, *subsinuata*, *serpentula*, *facialis*, *maculicornis*, *millenaris*]. [Entomological Investigations in Kyrgyzstan], 22, 11–22. [in

- Russian with English summary]
- Tarbinsky, Yu. S. (2002b) The golden wasp genus *Chrysis* L. (Hymenoptera, Chrysididae) in Tien Shan and adjacent territories. III. Species groups *zaravshanica*, *sogdiana*, *aestiva*, *rufitarsis*, *pulchella*, *inaequalis*. [*Entomological Investigations in Kyrgyzstan*], 22, 23–30. [in Russian with English summary]
- Tarbinsky, Yu. S. (2002c) [The golden wasp genus *Chrysis* L. (Hymenoptera, Chrysididae) in Tien Shan and adjacent territories. IV. Species groups *graelsii*, *comparata*, *splendidula*, *viridula*, *scutellaris*]. [*Entomological Investigations in Kyrgyzstan*], 22, 31–44. [in Russian with English summary]
- Tormos, J., Asis, J.D., Gayubo, S.F. & Mingo, E. (1996) Description of the mature larvae of *Chrysis gracillima* and *Omalus biaccinctus* and new data on the biology of *Trichrysis cyanea* (Hymenoptera: Chrysididae). *Florida Entomologist*, 79 (1), 56–63.
 - https://doi.org/10.2307/3495754
- Tournier, H. (1879) Description d'Hyménoptères nouveaux appartenant à la famille des Chrysides. *Bulletin et Annales de la Société Royale Belge*, 22, 87–100.
- Trautmann, W. (1926) Untersuchungen an einigen Goldwespenformen. *Entomologische Zeitschrift*, 40, 4–12. https://doi.org/10.1002/mmnd.48019220216
- Trautmann, W. (1927) Die Goldwespen Europas. G. Uschmann, Weimar, 194 pp.
- Trautmann, W. (1928) Über Cleptes nigriventris du Buysson (Chrysid.). Entomologische Mitteilungen, 17 (1), 79.
- Tsuneki, K. (1953) Chrysididae of Korea (Hymenoptera). Kontyu, 20 (1–2), 22–28.
- Tyrner, P. (2007) Chrysidoidea: Chrysididae (zlatěnkovití). *In*: Bogusch, P., Straka, J. & Kment, P. (Eds.), Annotated checklist of the Aculeata (Hymenoptera) of the Czech Republic and Slovakia. Komentovaný seznam žahadlových blanokřídlých (Hymenoptera: Aculeata) České republiky a Slovenska. *Acta Entomologica Musei Nationalis Pragae*, (Supplementum 11), 300 pp.
- Uchida, T. (1933) Catalogue of Japanese Insects, II. Hymenoptera Chrysidide. Entomological World, Tokyo, 8 pp.
- Vas, Z. (2015). A brief history of the Hymenoptera Collection, HNHM. *Annales historico-naturales Musei nationalis hungarici*, 107, 87–100.
- Viereck, H.L. (1922) Obituary [Mocsáry, A.]. Entomological News, 33, 157–158.
- Wei, N-S., Rosa, P., Liu, J.-X. & Xu, Z.-F. (2014) The genus *Omalus* Panzer, 1801 (Hymenoptera, Chrysididae) from China, with descriptions of four new species. *ZooKeys*, 407, 29–54. https://doi.org/10.3897/zookeys.407.7531
- Winterhagen, P. (2015) Strategy for sneaking into a host's home: the cuckoo wasp *Omalus biaccinctus* (Hymenoptera: Chrysididae) inserts its eggs into living aphids that are the prey of its host. *European Journal of Entomology*, 112 (3), 557–559
 - https://doi.org/10.14411/eje.2015.064
- Zilahi-Kiss, E. (1915) Újabb adatok Magyarország Hymenoptera-faunájához. II. [Neuere Daten zur Hymenopterenfauna von Ungarn, II.]. *Rovartani Lapok*, 22, 76–86.
- Zilahi-Kiss, E. (1927) Über einige neue Arten und Varietäten heimischer Hymenopteren. Verhandlungen und Mitteilungen des Siebenbürgischen Vereins für Naturwissenschaften zu Hermannstadt, 77, 12–20.
- Zimmermann, S. (1954) Catalogus Faunae Austriae. Teil XVI: Hymenoptera-Tubulifera: Cleptidae, Chrysididae. In: Einzeldarstellungen herausgegeben von der Österreichischen Akademie der Wissenschaften unter Mitarbeit von Fachzoologen, Springler-Verlag, Vienna, 16 pp.
- Zimmermann, S. (1962) Neue Goldwespenfunde in Österreich (Hymenoptera, Chrysididae). III. Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen, 13 (3), 83–84.